

1898. QUEENSLAND.

# REPORT OF THE REGISTRAR-GENERAL ON AGRICULTURAL AND PASTORAL STATISTICS FOR 1897.

Presented to both Houses of Parliament by Command,

# TO THE HONOURABLE THE HOME SECRETARY.

SIR,—I have the honour to forward for your information the usual Report on the Statistics relating to the Agricultural and Pastoral Industries for the year 1897. With respect to the former, the season has been, taken altogether, a satisfactory one. The past year witnessed a large addition to the area brought under the plough, the increased acreage under wheat materially contributing to this result. More sugar-cane was planted and more hay housed, and the fruit production was also greater. The pastoral industry was less fortunate, the experience of 1897 not being a favourable one with respect to live stock, the loss of cattle being greater than for some years past, whilst, with the exception of 1893, the same remark equally applies to sheep. the same remark equally applies to sheep.

# COLLECTION OF STATISTICS.

The live stock statistics, and also those relating to agriculture, are now collected under statutory authority. The former are obtained through clerks of petty sessions, to whom returns of all live stock have to be made annually by their owners, and the latter are collected by the police by personal application. The method fixed by law for the collection of live stock statistics cannot be considered to work satisfactorily, as the public appear slow to realise that these returns have to be made spontaneously by them every year, and altogether independent of the fact whether any assessment is to be levied under any of the various Acts connected with live stock or not—and are given to conclude that when no assessment is to be levied no return need be made. Most of the clerks of petty sessions it is true endeavour to remove this impression and use every effort to carry out the provisions of the Act, but some either have not the time or the inclination to do so in a prompt and energetic spirit, and the consequence is that, not unfrequently, applications are made to the Statistical Office for "instructions" to give effect to the penal clauses of the Stock Returns Act at a period of the year when the printed list should be in the hands of the officers of the Rabbit and Marsupial Boards. This occurs, notwithstanding the fact that special instructions have been issued from the Home Secretary's office to clerks of petty sessions to give, at their own discretion, full effect to the law at a much earlier period of the year. The returns are required to be made before the 1st February in each and every year, and clerks of petty sessions are instructed to send them on to this office twice every month; but the extraction from some 36,000 forms necessarily takes some time to accomplish, and then an alphabetical list by districts has to be compiled and printed of about 20,000 of these. These lists form the basis of the electoral rolls and assessments of Marsupial and Rabbit Boards throughout the colony, and should be supplied to The live stock statistics, and also those relating to agriculture, are now collected under statutory

The agricultural statistics are collected on special schedules on the personal application of an officer of police, and much less difficulty is for the most part experienced in punctually obtaining the requisite information, although the returns are of necessity of a much more intricate nature.

## NUMBER OF LIVE STOCK.

Reference has already been made to the important decreases in cattle and sheep which have resulted during last year. There was a substantial increase in the number of horses, and a considerable addition to the number of pigs in the colony, but these most inadequately compensate for the decline in numbers of the more valuable classes of live stock.

C. A. 83-1898.

The number of live stock of all kinds in the colony at the end of the past two years, together with the increase and decrease, is shown in the following table:—

		1		
Year.	Horses.	- Horned Cattle.	Sheep.	Pigs.
1896 1897	452,207 479,280	6,507,377 6,089,013	19,593,696 17,797,883	97,434 110,855
Numerical Increase in 1897 Numerical Decrease in 1897	27,073 	418,364	1,795,813	13,421 
Centesimal Increase in 1897 Centesimal Decrease in 1897	5.99	6.43	9.17	13.77

The proportional increase in horses and pigs amounted to 6 per cent. and 14 per cent. respectively, whilst the relative decreases in cattle and sheep were  $6\frac{1}{2}$  and  $9\frac{1}{4}$  per cent. The supply of horses is fully adequate to the requirements of the colony, and the prospects of disposal in foreign markets can hardly be considered encouraging, so that their increase or decrease is not a matter of great moment. The exports, however, exceeded the imports by 4,054, so that there increase for 1897 is accentuated to that extent. The number exported by sea was 358 only, of which 307 were shipped to India. Pigs, on the other hand, would appear to offer a larger room for profit, and a substantial increase in their number is of greater importance. The 110,855 pigs found in the colony at the end of 1897 has only been exceeded on two occasions—namely, in 1891 and 1892, when the numbers were 122,672 and 116,930 respectively.

At the end of 1897 there were 6,089,013 cattle in the colony, which was 418,364 fewer than at the end of 1896. This decrease considerably exceeded the total number of cattle in each of three of the other colonies. In 1896 the number of cattle in Queensland exceeded the aggregate number of the other six colonies of the Australasian group. The loss recorded was due to excessively dry weather throughout

At the end of 1897 there were 6,089,013 cattle in the colony, which was 418,364 fewer than at the end of 1896. This decrease considerably exceeded the total number of cattle in each of three of the other colonies. In 1896 the number of cattle in Queensland exceeded the aggregate number of the other six colonies of the Australasian group. The loss recorded was due to excessively dry weather throughout the south-westerly and westerly portions of the colony, the actual mortality from tick fever in the more easterly districts not having proved nearly so severe as that resulting from drought in the dry regions of the colony. The loss in sheep was both actually and relatively greater than that of cattle. At the end of 1896 the sheep numbered 19,593,696, and at the end of 1897 17,797,883; or a decrease of 1,795,813 during the year. The centesimal proportion of increase or decrease amongst all kinds of live stock for each of the last ten years is given in the following table:—

						В.		
Year.				Horses.		Cattle.	Sheep.	Pigs.
				6.04		4:05	 4.01	 -6.34
1888							7.64	17.01
1889				8.61		4.67	 연기 회사 기가 내려가 하다 하다 하나 하나 하다.	
1890				3.82		14.08	 24.44	 19.95
						11.42	12.67	 26.67
1891				9.20				-4.68
1892				5.86		6.44	 6.99	
1893	1			1.65		1.54	 -13.87	 -41.77
						4.78	4.76	 31.71
1894				3.35	***			12.34
1895		113000	00000	5.55		-2.72	 1.37	
		a In the		- 3.53		-4.63	 -1.33	 -3.29
1896						-6.43	-9.17	 13.77
1897				5.99		- 0.45	 011	
					— D	ecrease.		

On one occasion only during the past ten years has there been a decrease in the number of horses. For the whole period the actual increase has amounted to 173,415, that is from 305,865 in 1887 to 479,280 in 1897; which gives a proportionate increase of 57 per cent. The first seven years of the decade witnessed an increase in the number of cattle for each year, but for the last three decreases have been annually recorded. During two years 1890 and 1891 the increases amounted to 14 and 11 per cent. respectively. There were 1,615,297 more cattle in the colony at the end than at the beginning of the decennium, notwithstanding the large numbers which during that period have been put to profit. So that it will be seen that whilst individual seasons may prove unfortunate, the general expansion of the pastoral industry has been most satisfactory. The loss of sheep recorded during the last two seasons bears a more serious aspect. With cattle, so long as the supply is equal to satisfying the demands of all available markets, any losses, serious as of course they are to the individual owner, are of less moment from a national standpoint, as being incapable of producing an annual increment, the surplus being worth the value of the hide and tallow only, whilst any loss in sheep at once affects the output of one of the great staple productions of the colony.

As with cattle, during the last ten years sheep have shown on seven occasions increases and on three decreases. The latter took place in 1893, 1896, and 1897, the one in the first-named year proving relatively the largest, amounting to 14 per cent. on the figures of the previous year. The years 1890 and 1891, which were such satisfactory ones for cattle, were equally favourable for sheep, the proportionate increases in those years being 24 and 13 per cent. respectively. The figures relating to pigs show that the number of these fluctuates considerably. The records for ten years show centesimal variations going into double figures on no less than seven occasions.

#### DISTRIBUTION OF STOCK.

The conditions of the pastoral industry of Queensland have of necessity resulted in great variations from year to year in the number of stock in specific localities, irrespective of the increase or decrease which may have taken place with respect to the total numbers in the colony. Even when the seasons are favourable, the movements with respect to the marketing of fats, of the transfer of stores to more

suitable districts for fattening, and the changes of policy with regard to station management respecting the kind of stock depastured would always be productive of great fluctuations. In dry seasons, however, the conditions are intensified by the necessity of travelling live stock from pasture to pasture to save them from starvation, added to the fact that stock routes are provided for and protected by legislation, and, being usually laid out along a course at least moderately well watered, are frequently better grassed in dry seasons than some of the less favourably situated runs. These circumstances more particularly apply on comparing the number found within limited areas, such as individual petty sessions districts, whilst increases or decreases found in larger areas may be more safely attributed to climatic variations.

The figures contained in the following table relate to the number of live stock found in each of

the three great divisions of the colony at the end of the past two years :-

Division.	Year.	Horses.	Cattle.	Sheep.	Pigs.
SOUTHERN	1896 1897	220,528 228,512	2,565,491 2,405,099	8,452,572 7,559,023	80,438 87,810
Numerical Increase in 1897  Numerical Decrease in 1897  Centesimal Increase in 1897  Centesimal Decrease in 1897		7,984  3·62 	160,392  6·25	 893,549  10·57	7,372  9·16 
DENTRAL	1896 1897	125,426 132,155	1,991,769 1,801,858	9,434,826 8,454,194	8,117 9,609
Numerical Increase in 1897  Numerical Decrease in 1897  Centesimal Increase in 1897  Centesimal Decrease in 1897		6,729  5·36 	189,911  9·53	980,632  10·39	1,492  18·38 
NORTHERN	1896 1897	106,253 118,613	1,950,117 1,882,056	1,706,298 1,784,666	8,879 13,436
Numerical Increase in 1897  Numerical Decrease in 1897  Centesimal Increase in 1897  Centesimal Decrease in 1897		12,360  11.63	68,061  3:49	78,368  4·59 	4,557  51·32 

The heaviest decrease in cattle was found in the Central division, where it amounted to a little less than 10 per cent. on the figures of the previous year; whilst that in the Northern division amounted to  $3\frac{1}{2}$  per cent. only, the Southern division coming half-way between the two, with a ratio of  $6\frac{1}{4}$  per cent. Although in the last-mentioned portion of the colony the effects of the bad seasons were, with respect to cattle, less severely felt than in the Central division, such was not the case in connection with sheep, for, in the South, this class of live stock appears to have suffered to fully as great an extent as in any part of the colony. The North was much more fortunate, as, instead of a loss, there was a small increase amount in the colony. small increase amounting to 41/2 per cent.; whilst in the other two divisions there was a loss exceeding 10 per cent.

On passing to a consideration of the increases and decreases in each district, the fact that some of these are due to transfers, as already pointed out, must not be lost sight of

Full particulars as to the number of cattle and sheep in each district of the colony for the past two years, with the increase or decrease in 1897, are given in Tables Nos. 2 to 4 in the Appendix.

In the Southern division increases resulted in 32 districts, and aggregated 67,268. Of these, accessions exceeding 5,000 were found in—Goondiwindi, 8,892; Beaudesert, 7,553; Gympie, 6,842; and Gayndah, 5076. The number of districts with decreases was 26, but the sum of the decline totalled to 227,660, leaving a net decrease for the whole division of 160,392. Decreases exceeding 20,000 occurred in the following districts:—Windorah (southern half), 41,265; St. George, 34,254; Mitchell, 32,390; and Charleville, 26,152. In the following districts the decline on the figures of the previous year amounted to upwards of 10,000—namely, in Taroom, Surat, Roma, and Thargomindah. In sheep 26 districts showed increases and 31 decreases. Of the former, 5 only exceeded 10,000:—Dalby, 181,164; Warwick, 50,831; Goondiwindi, 42,040; Taroom, 12,908; Condamine, 11,576. The increase in Dalby was largely due to a large holding, wrongly included in Toowoomba in 1896, being now transferred to its proper district, although it was in part caused by large flocks of travelling stock. Of the decreases those proper district, although it was in part caused by large flocks of travelling stock. Of the decreases those exceeding 100,000 were found in the following districts:—St. George, 299,558; Augathella, 193,333; Charleville, 166,042; and Tambo, 152,066.

In the Central division the aggregate increases of cattle amounted to but little more than one-tenth of the aggregate decreases. The chief of the former were Mount Morgan, 10,067; and Clermont, 7,013; and of the latter, Boulia, 61,534; Windorah (northern half), 41,265; Springsure, 39,474; Mackay (part of), 16,223; and Banana, 11,641. The decreases in sheep aggregated to more than ten times the increases, and the net decrease amounted to 980,632. The principal increases were: Boulia, 50,626; Rockhampton, 14,504; and Aramae, 13,380; and the decreases. Winter, 242,843. Longreech times the increases, and the net decrease amounted to 980,632. The principal increases in the decreases increases, and the net decreases increases. Winton, 242,843; Longreach, 50,626; Rockhampton, 14,504; and Aramac, 13,380; and the decreases: Winton, 242,843; Longreach, 241,183; Isisford, 216,479; Barcaldine, 142,747; and Blackall, 109,554. Passing to a consideration of the Northern division, the aggregate gross increases of cattle approached much nearer to the aggregate the Northern division, the aggregate gross increases of cattle approached much nearer to the aggregate and the Northern division, the aggregate gross increases of cattle approached much nearer to the aggregate much nearer of the decreases, whilst, as already pointed out, there was a small net increase in sheep. The principal excesses of cattle were—Cloncurry, 51,763; and Burke, 48,808; the chief deficiences being: Bowen, 64,829; Norman, 34,535; and Etheridge, 32,466. The more important increases in sheep were—Hughenden, 54,649; and Cloncurry, 28,411. The decreases were insignificant.

#### CAUSES OF LOSSES.

The heavy losses obtaining amongst the flocks and herds of the colony during 1897 were due to drought and redwater, the latter consequent on the fever which is caused by the peculiar tick Ixodes Bovis, which, although of foreign origin, has now become established—at least for a time—in the colony. Rabbits, moreover, although perhaps not productive of direct loss, are having an influence on the stocking capacities of the runs in the Western portion of the colony. Other plagues which sometimes affect the occupants of the pastures of the colony were fortunately but little in evidence last year.

The most fruitful source of last year's decrease of live stock was undoubtedly the dry weather. Felt to some extent throughout the whole colony, in some portions of the Western areas it was very severe. The Northern division suffered only slightly, but even the coastal districts elsewhere received only a very limited rainfall, the crops suffering in consequence, although in the well-settled districts no great amount of mortality amongst cattle now takes place unless the drought is exceptionally severe. Throughout the North and South Gregory, Warrego, Maranoa, and Mitchell very dry weather was experienced in 1897, whilst the season was not much more favourable in South Kennedy, Leichhardt,

and on parts of the Darling Downs.

Ticks have attracted much more notice than the drought, although the results of a visitation from this pest are not so disastrous. Starting in the Gulf country some years ago, from thence spreading and to the east coast, and from there southerly, they have now progressed as far south as Bundaberg, and the advance guard has reached even to Brisbane. An insect which in its embryo state is very minute, and apparently open to conveyance by wild birds, and capable of carriage in the *débris* of flooded rivers, is not likely to be stopped by any barrier short of an ocean, unless the climatic conditions of a country are inimical to its existence. It has been traced at times in many parts of the world, much of Southern Europe having been visited so that the conbeard districts of Australia are hardly likely. of Southern Europe having been visited, so that the seaboard districts of Australia are hardly likely to be exempt. The hot, dry sands of the interior would fortunately appear to prove too severe for the tick, and it has been asserted that they are unable to live in such soil when the temperature reaches 100 degrees Fahrenheit, whilst dense vegetation in moister localities is most favourable to their extension. It is certain that they have not spread into parts of Queensland where the former conditions obtain. The pastoral districts of North and South Gregory, Warrego, and Maranoa being country of this description, are exempt from their encroachment, whilst South Kennedy, Leichhardt, Port Curtis, and Mitchell are only partially affected, and in the Burke district they have not extended south of Barclay's Tableland. It does not appear probable that any system of quarantine, no matter how strict, can possibly prevent their advance, and, naturally, widely differing views are held as to the nature and extent of the quarantine which it is advisable to establish. There is no doubt, however, that the efforts adopted have materially delayed their progress thus affording time for experiment as to various efforts adopted have materially delayed their progress, thus affording time for experiment as to various preventive measures. Dipping, at one time believed in, is no longer in use to any extent, although reports from St. Lawrence and Mackay tend to show that some benefit has resulted from its adoption. Inoculation has now been proved fairly effective as a means of prevention against any great mortality from attacks of tick fever. The fact that the virulent effects that follow the first presence of ticks on a previously clean pasture are not experienced to anything like the same extent after they have been for some time established in a locality, would confirm the idea that, practically, immunity from attack is after a time acquired by a herd.

The results of a number of experiments made by Mr. Pound and Dr. Hunt serve to justify the conclusion that a like immunity may be artificially secured for a beast by inoculation with a hypodermic injection of the blood of a recovered animal. The blood may be taken from one surviving an acute attack of tick fever, whether the same was naturally or artificially acquired. One authority inclines to the idea that the use of the blood of a beast recovered from a naturally acquired attack would be likely to secure greater immunity, but would involve greater risk in the operation, and might therefore, with advantage, in the case of valuable animals, be preceded by an induced attack of fever from the recovered blood of an artificially produced case, so as to make the attack more gradual and less virulent. It has now been fully demonstrated that the chances of mortality from attacks of fever are greatly enhanced by the moving or disturbing of the suffering animal, so that if stock are attacked when travelling unless at once let alone and allowed to rest, the fatality will be largely increased. The chance of success with inoculation is greatly improved by the exercise of care, not only in the operation, by regulating the quantity and the purity of the recovered blood to be used, but also in the subsequent treatment of the animals, who should be left quiet in paddocks well grassed and watered, and provided with shade. The immunity brought about by the process of nature has resulted in securing, to a very large extent, against fatal attacks those portions of the colony where the ticks first appeared. In the Burke district—and the same is true in a lesser degree over an increasing area in the Northern division—although the ticks still infest the pastures, the mortality caused by them amongst cattle is very slight, and is there frequently induced by some untoward circumstance, such as exhaustion from over travelling or being hurriedly

The dry weather experienced in the West for several seasons past has had one good result: the spread of the rabbit pest has been much retarded. The vigorous measures which at length were taken in causing the erection of rabbit-proof wire fences along the southern boundary of the colony have also been instrumental in keeping the rabbit in check. It has proved quite impossible to keep these animals back by any one fence, so the policy has been adopted of erecting a number of interior cross fences, thus dividing the South-western portion of the colony into what may be described as a number of huge paddocks, wherein a variety of measures are put in force for their destruction. Although there would appear to be a large difference of opinion as to the efficacy of inoculation with chicken cholera to eradicate the rabbits, the weight of evidence would seem to point to the fact that, where carefully and systematically carried out, a considerable mortality occurs, and one rabbit board is so satisfied with the results following efforts made by them on a small scale, that they are now taking steps to extend their operations, and are procuring a large supply of chicken cholera cultivation for the purpose.

If no consideration were given to the increases which under normal conditions accrue to the flocks and herds of the colony, then the large numbers of both cattle and sheep which have been utilised during 1897 would more than counterbalance the decrease in the actual numbers found at the end of the year, and with respect to cattle, even allowing for the usual average increase, the number converted to use to a slight extent discounts the loss, as shown by the difference between the figures for the two

years.

This will be better illustrated by the following statement:—		
Number in the colony at end of 1896  Add annual "cast" that should under ordinary conditions be available—say, 10 per cent. for cattle, and 15 per cent. for sheep	Cattle. 6,507,377 650,738	Sheep. 19,593,696 2,939,055
Utilised during the year—	7,158,115	22,532,751
By excess of export over import 163,132 Killed mostly for export for food or as tallow 259,363 Killed for home consumption (estimated) 239,220 945,855 956,880		
Total utilised	661,715	2,727,237
Total in colony at end of 1897	6,496,400 6,089,013	19,805,514 17,797,883
Total deficit, taking normal increase into account	407 387	2 007 631

The normal increase or "cast" of cattle and sheep respectively is usually estimated at 10 per cent. for the former and 15 per cent. for the latter. This would bring the number which, under ordinary conditions, would have been found on the Queensland pastures at the end of 1897, or had been put to use during that year, to 7,000,000 cattle and 22,500,000 sheep. The numbers utilised were two-thirds of a million and tracend three querter millions respectively, which makes a deficit taking these thirds of a million and two and three-quarter millions respectively, which makes a deficit, taking these various elements into consideration, of 400,000 cattle and 2,000,000 sheep.

The 661,715 cattle utilised were comprised of 163,132 exported from the colony alive in excess of

the number imported; 259,363 slaughtered within the colony, chiefly for export, either in the form of frozen or preserved beef, extract, &c., or as tallow and hides; and 239,220 killed for consumption within the colony. The corresponding figures for sheep were—Excess of exports of live sheep, 824,502; exported in the carcass, preserved, or in the results obtained from boiling down, 945,855; and killed

for food for use within the colony, 956,880.

The consumption of meat within the colony has been estimated upon the basis of half a bullock and two sheep per annum for each of the population. The approximate accuracy of an estimate framed on this basis is confirmed by the actual facts with respect to the meat consumption in some of the principal towns of the colony, as ascertained by returns received from the inspectors of slaughter-houses, full particulars of which will be found at Table No. 7 in the Appendix.

After making allowance for the varying conditions as to age, sex, occupation, and opportunities for obtaining other than meat food, which exist amongst the urban population represented, as compared with that of the rest of the colony, the figures fairly justify the basis which has been accepted for an estimate. This table relates to a population of 245,771, or 51 per cent. of the total mean population of the colony; but then it also largely consists of women and children, and of those also who are not such large consumers of meat as are the residents in rural districts. The average consumption of flesh amongst the urban population of the colony was 311 lb., of which 240 lb. consisted of beef, 60 lb. of mutton, and 11 lb. of veal, lamb, and pork, exclusive of poultry, fish, &c.

Great differences are to be found between various districts, not only as to the total consumption but also as to the relative proportions of beef and mutton. The differences as to the former are largely due to the varying areas under the control of slaughter-house inspectors, as with some the district is so restricted as to comprise urban and suburban populations only; whilst with others so wide an area is embraced that a considerable rural population has been catered for. Roma, with a per capita consumption of 574 lb., of which 453 lb. were beef and 109 mutton, was the heaviest, and Gympie, with

only 203 lb. per head, was the smallest.

# DISPOSAL OF SURPLUS LIVE STOCK.

The severity of the drought during the past year was sufficiently felt by both kinds of live stock, as not only to have a marked effect on the output of wool, but also to check the supply available for treatment at the various freezing and preserving establishments of the colony. Notwithstanding this the number of live stock exported, either dead or alive, during 1897 considerably exceeded the mean of the previous three years.

EXPORT OF LIVE STOCK.

Both horned cattle and sheep were exported in much greater numbers than they were imported. Whilst 13,197 cattle were introduced into the colony during 1897, there were 176,329 head sent out either by sea or across the border. With respect to sheep the differences between export and import were not relatively so great, but the numbers dealt with were so much larger that the outward traffic exceeded that into Queensland by 824,502.

The imports and exports of cattle and sheep for each of the past ten years are shown in the following table :-

		ung il wob l	Year.				Horned	Cattle.	Sheep.		
	g Kusa			33.89			Inwards.	Outwards.	"Inwards.	Outwards.	
888								(pl) (5)(0 ) (qu) 1 (95)(1)	ent got require	g _288550011 _1L	
889					•• 7		1,111	188,748	234,167	248,804	
890							1,867	175,117	222,369	311,583	
							3,684	494,944	386,625		
891							3,535	210,240	281,670	472,282	
892							6,923	130,989		513,201	
393							7,003		463,323	421,318	
394							2,286	183,663	223,655	1,016,945	
395						****		135,858	156,596	430,646	
396				***			5,590	80,620	186,007	295,032	
397							10,127	272,622	94,620	899,720	
301					***		13,197	176,329	289,768	1,114,270	

The number of cattle imported is very small, but still during the past two years it has been an increasing quantity, due to some extent to larger imports of stud cattle to replace those lost during the drought, the effects of which are always most severely felt by this class of stock. During the first five years of the decade 17,120, or an annual average of 3,424 head, were imported, whilst during the last quinquennium there were 38,203, or an annual average of 7,641. The exports of cattle, on the other hand, were more numerous during 1888-92 than during the later period, numbering 1,200,038, or an annual average of 240,000 during the first background average of 240,000 during the 240,000 annual average of 240,008 during the former, and 849,092, or an annual average of 169,818, for the annual average of 240,008 during the former, and 849,092, or an annual average of 169,818, for the latter quinquennium. During the whole ten years the exports exceeded the imports by 1,993,807. Of sheep, whilst rather more than 250,000 passed into the colony last year; those outwards considerably exceeded 1,000,000. The imports for 1897 were larger than in any year since 1892, when they approximated 500,000. Unlike the case with cattle, the importation of sheep was greater during the first half of the decade than during the past five years. In the former period 1,588,154 sheep entered the colony, and only 950,646 during 1892-97. There were more sheep exported during 1897 than in any previous year of the last decade. In 1893 the number exceeded 1,000,000. The excess of exports over imports was 3,185,001; and of the 5,723,801 exported during the ten years, 1,967,188, or 34 per cent., left in the first half, and 3,756,613, or 66 per cent., in the second half of the ten-year period. half of the ten-year period.

# LIVE STOCK SLAUGHTERED FOR EXPORT (CHIEFLY).

When some twelve years ago the possibilities of transporting meat in the carcass to the markets of Europe were demonstrated it seemed to offer a complete solution of the question, "What shall we do with our live stock?" The shipments of frozen meat have since then formed a most important element in the exports of the colony, but producers have found much to contend with. In the establishment of a new industry, or in the opening up of fresh markets, much experience has to be acquired, and is

necessarily secured at the cost of many mistakes.

There is no doubt that many difficulties that were encountered were unavoidable. An o largely sentimental, to frozen meat on the part of the consumer was one of the chief of these. were occasioned by the not unnatural opposition of the London meat salesmen, who, by combination for the purpose, have greatly retarded the introduction of colonial frozen meat avowedly as such to the consumer; dishonest retailers frequently selling meat, purchased at frozen prices, as British beef and mutton. The shippers here, however, have been at times to blame; their course of action in freezing and loading inferior meat have done much to justify the prejudice that undoubtedly exists against the colonial article. Irregularity as to quality has been much complained of, and inferior consignments tend to lower the reputation of all shipments from the same colony. One of the largest of the business firms in to lower the reputation of all shipments from the same colony. One of the largest of the business firms in London connected with the frozen meat trade, in its annual report, speaks very strongly on this point, and makes the following recommendations:—" That there should be thorough and careful inspection at port of shipment, with summary power of rejection, not only for disease, which is now fully carried out, but also for inferior quality and appearance, also to see that the meat is properly frozen in accordance with the most improved methods; that the ships' chambers are in a proper condition as to temperature, &c., to receive the meat, and that proper provision be made for ascertaining and maintaining the requisite temperature throughout the voyage; and that differential rates of freight should be arranged for ships in accordance with their record as to the landed condition of previous cargoes; also that, provision be made in London and elsewhere for careful and proper storage, and a system of sorting and classifying consignments be adopted." It is satisfactory to note that the same firm announces that the demand for frozen meat has increased at a greater ratio than the supply.

The shipments of Australasian, especially Queensland, meat have been limited during the early queensland, meat have been limited during the early the shipments of Australasian, especially Queensland, meat have been limited during the early the shipments of Australasian, especially Queensland, meat have been limited during the early the shipments of Australasian, especially Queensland, meat have been limited during the early queensland.

months of the current year, and consequently the stocks of the colonies frozen meat in London are low; but this has failed to result in any appreciable rise in price, as shipments of both live stock and meat from elsewhere have increased. At the time of writing it would appear that a gentleman, a member of a firm in business in Brisbane, is taking steps to establish in London, on a large scale, a food supply company, to receive and distribute perishable food supplies for Great Britain. A gentleman largely connected with the meat extract trade lecturing in London recently, expressed the conicion that there connected with the meat extract trade, lecturing in London recently, expressed the opinion that there was a great future for Queensland extract, which was of exceptionally good quality. A new company for

the production of extract is about to be formed in Rockhampton.

Full particulars as to the slaughter and preservation of meat at the various preserving, freezing, and boiling-down establishments of the colony during each of the past ten years will be found detailed at

Table No. 5 in the Appendix.

There were 38 factories engaged last year in the conversion of live stock of all kinds into food There were 38 factories engaged last year in the conversion of live stock of all minds of products. This was 3 more than the number so occupied in 1896, though still 1 short of those returned in 1895. The number of hands employed—namely, 2,604—in 1897 was, however, 234 less than in 1896, and 244 less than were so employed in 1895. The number of cattle killed for preserving in 1896, and 244 less than were so employed in 1895. in 1896, and 244 less than were so employed in 1895. -62,342—was fewer than in either of the preceding years, but those killed for freezing were greatly in excess of the number ever before so treated. The numbers killed for export, chiefly in a frozen state, during each of the past 5 years, were:—1893, 39,828; 1894, 48,558; 1895, 80,487; 1896, 76,483; and 1897, 111,267. So that the number killed for freezing last year exceeded by nearly three times the number so returned in 1893. In corposition with this question, one important point must be home in number so returned in 1893. In connection with this question, one important point must be borne in mind—information is collected as to the quantity of meat preserved, frozen, or boiled down, and also as to the number of carcasses submitted to these three different modes of treatment. But the latter can be approximate only, as in many instances different portions of the same carcass may be subjected to each process, perhaps, for instance, the hindquarter frozen and parts of the forequarter preserved, and each process, perhaps, for instance, the hindquarter frozen and parts of the forequarter preserved, and parts boiled down, either for extract or tallow. Thus it becomes impossible to exactly apportion the number of live stock to each process, and so considerable differences will be found as to the average weights, year by year, of stock returned under each head. There were not quite so many cattle boiled down as in either 1895 or 1896, the numbers for those years and for last year being 98,374, 87,562, and 85,754 respectively. There were 259,536 sheep killed for preserving, 70,865 for freezing, and 615,454 boiled down during 1897. These proportions must be again taken as approximate only the apportionment. boiled down during 1897. These proportions must be again taken as approximate only, the apportionment being subject to the same disturbing influence already referred to in the remarks on cattle, although to a lesser degree. The aggregate number of sheep slaughtered was greater last year than in 1896, the increase being amongst those boiled down, the number, both preserved and frozen, being less in the former than in the latter year. The decrease on the part of that frozen was a pronounced one.

There was a larger output of beef, both preserved and frozen, last year than ever before, the increase in the former being very great. The figures for the last two years were: 1896—preserved, 19,197,234 lb.; frozen, 50,245,213 lb.; 1897—preserved, 35,037,555 lb.; frozen, 62,764,267 lb. On the other hand, the amount of mutton preserved and frozen—namely, 1,970,959 lb. and 2,952,290 lb.—was much below the production for 1896; for, notwithstanding that there were more sheep killed in the former year, as already pointed out, the proportion of those boiled down in 1897 was greatly in excess of these so treat of far 1806. The fall was treated for the property of the state of the second state of th of those so treated for 1896. The following statement summarises the output of the different slaughtering establishments in operation during the past five years, and also shows the production for the individual year 1897 :-

			1897.	Five years, 1893-7.
Number of Cattle l	cilled f	or—		
Preserving			 62,342	366,489
Freezing			111,267	356,623
Boiling down			85,754	380,467
Donning down	10,11		00,,01	
Total			 259,363	1,103,579
Number of Sheep k	illed for	or—		
Preserving			 259,536	1,451,820
Freezing			 70,865	370,827
Boiling down			 615,454	3,276,817
Total			 945,855 Lb.	5,099,464 Lb.
Beef—				00 154 050
Preserved			 35,037,555	89,475,673
Frozen			 62,764,267	224,801,960
Total			 97,801,822	314,277,633
Mutton—				
Preserved			 1,970,959	17,563,277
Frozen			 2,952,290	16,188,131
Total			 4,923,249	33,751,408

Thus upwards of 1,000,000 cattle and 5,000,000 sheep have been slaughtered practically for export during the past five years, or an annual average of 220,716 cattle and 1,019,893 sheep. The number killed for the like object during 1897 exceeded the mean of the five years in cattle, and fell somewhat short of the mean in sheep; but the excess of cattle, if converted into the terms of sheep on the generally accepted basis of 1 to 10, much more than counterbalances the falling off in sheep; so that the number killed during 1897 may be said to be above the average of the five years. As products of the boiling down there were returned for 1897 of extracts and essences 463,386 lb., and of tallow 13,651 tons. This shows a falling off in the former and a slight increase in the latter; the output of 13,651 tons. This shows a falling off in the former and a slight increase in the latter; the output of extracts, &c., being less than in either 1895 or 1896, but yet considerably in excess of previous years. The output of tallow last year was only twice exceeded; this was in 1895, when there was a production of 21,263 tons, and in 1894, when 15,683 tons was produced.

#### WOOL PRODUCTION.

Wool is of course by far the most important of the products connected with the pastoral industry, Wool is of course by far the most important of the products connected with the pastoral industry, seeing that there are some 18,000,000 to 20,000,000 sheep shorn annually. The question of establishing local wool sales has occupied much attention during the past few months. Some ten years ago an attempt was made to accomplish this, but without success. The matter has been again taken up with energy, and there is every appearance of its being brought to a successful issue. The same arguments against the establishment of wool sales in Brisbane were used that were brought against the idea of their establishment in the southern colonies—namely, that buyers would not attend, the fallacy of which

argument having in the latter case been since fully proved.

The exports of wool for 1897 amounted to 76,360,239 lb., valued at £2,509,342, so that, next to gold, wool is the most valuable production of the colony. Of the total quantity, 55,418,473 lb. were shipped in the grease, and 20,941,766 lb. scoured; practically the whole quantity exported was of home

production.

#### OTHER PASTORAL PRODUCTS.

The by-products of the various establishments engaged in meat preserving, &c., are shown in

Table No. 6 in the Appendix.

Hides and skins form the most important portion of them, although this industry is now conducted upon such practical lines that no portion of a beast that can be in any way utilised is allowed to go to waste. It has, moreover, to be borne in mind that the figures do not include live stock slaughtered for home consumption, of which, however, it is probable that but little beyond the hides and skins and tallow are saved, but which would therefore add to these products some 240,000 hides and 955,000 skins. In connection with hides the market price has greatly improved during the past few months, the ruling rates in England, where hides have been scarce, controlling the colonial sales. A marked rise was occasioned at the time of the Japo-Chinese war by the increased demand for leather consequent thereon, so that it is quite possible that prices may be further enhanced by the present war. The output from the factories in question for 1897 was 259,160 hides, which was in excess of that for 1896, but below that for 1895, although the value last year was above that of either of the two previous years—namely, £161,979. The average value of hides for each of the three years was—1895, 11s. 6d.; 1896, 11s. 10d.; and 1897, 12s. 6d.

The skins (sheep) numbered 928,330, and were valued at £125,043. This was in both number and value in excess of 1896, but much less than for 1895. The average value of sheepskins last year, would appear to be 2s. 8d. each. Other by-products were: Manure, 10,738 tons, value, £24,654; edible fats, 673,385 lb., value, £8,455; bones, 954 tons, £3,696; horns and hoofs, £3,307; hair, 76,539 lb., £1,848; oils, &c., 18,478 gallons, £1,819. The total value of by-products in 1897 was £330,801, against £285,190 in 1896. The records for last year show considerable increase in every kind, and point to a much more general practice of conservation with respect to by-products.

#### SIZE OF FLOCKS.

One of the most satisfactory circumstances in connection with the sheepwalks of the colony is to be found in the gradually reducing average number of sheep to each holding. This exceeded 21,000 in 1890, and last year had become reduced to below 10,000. Under exceptionally favourable conditions as to season and locality, perhaps wool may be produced at a less cost per pound on a carefully worked large station; but, without considering the many other advantages of relatively small holdings, in times of drought or other disturbance of the normal season, sheep on selections in small flocks do not suffer as heavy a mortality as when held in enormous numbers on large runs.

In the following table particulars are given as to the sheepwalks of the colony, classed in accordance with the aggregate number depastured on each:—

E.

Petty Sessions		and nder.	51 t	o 1,000.	1,001	to 5,000.	5,001	to 20,000.		0,000 and Jpwards.		Number of heep.
Districts.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep	Owners.	Sheep.	Total Owners.	Total Sheep.
Adavale	000.	50		103,611	2.0		3	28,853	5	605,146	9	634,049
Aramac	S	70	4	2,200	8	22,396	12	123,634	3	-163,712	27	311,942
Augathella	3	27	2	560	2	2,050	4	43,461	2	106,970	13	153,068
Barcaldine	3	9	3	700	3	9,100	12	76,286	11	841,818	32	927,913
Blackall	5	132	5	2,480	8	26,012	10	100,665	8	743,799	36	873,088
Boulia						20,012	1	15,893	3	141,222	4	157,115
Charleville	18	259	15	5,549	4	18,640	4	29,490	6	263,118	47	317,056
Clermont	15	189	5	2,840	3	13,100	2	15,792	8	598,455	33	630,376
Cloncurry	9	111	1	700		1			5	381,520	15	382,331
Cunnamulla	4	32	7	3,969	41	131,055	34	289,000	11	843,090	97	1,267,146
Dalby	17	299	66	32,815	45	105,488	12	118,310	6	344,421	146	601,338
Fulo	i	1		02,010		100,400	5		4		10	
Goondiwindi	9	109	8	3,761	12	30,099	6	49,721 66,450	3	125,004 210,841	38	174,726 311,260
Hughenden	14	146	3	1,918	3	20,887	12	120,697	16	1,215,369	48	1,359,017
Hungerford	3	60				20,001		120,007	5	233,012	8	233,072
Isisford	2	50	1	200	2	7,116		deriteer!	6	617,473	11	624,839
Longreach	8	133	10	5.016	18			040.000				
N/1:4-1-11	9	146	21	8,979		53,037	23	240,863	16	1,465,454	75	1,764,503
Marttobarno	1	6	1	100	7	12,650		00.010	4	135,711	41 23	157,486
Dome	24	305	30	13,301	2	5,504	6	82,310	13	1,530,419		1,618,339
ar a	5	76	6		7	16,387	7	54,659	2	123,978	70	208,630
O	16	283	3	1,331	9	18,900	13	131,096	19	1,033,232	52	1,184,635
Suret	6	54		602	6	8,400	3	28,122	6	222,420	34	259,827
Tombo	6	69	9 5	5,750	10	25,820	6	45,482	3	144,953	34	222,059
The anaroni Jak	4	. 41	3	1,980	4	10,560	8	86,159	8	347,610	31	446,378
T	23	477		1,000	4	13,114	8	104,639	5	228,921	24	347,715
177 1	23	292	94	35,968	26	49,744	6	62,872	11	494,337	160	643,398
Windowsh	25	70	49	22,229	18	35,471	3	33,905	3	94,649	96	186,546
Winton	3	95	6	1,766	2	6,721	1	6,200	4	327,035	15	341,792
All other Districts	320	5,196	170	130 44,411	$\frac{1}{30}$	3,950 69,454	6 17	62,130 185,991	11 4	993,674 93,213	23 541	1,059,97 398,26
Totals	554	8,717	529	200,255	275	715,655	224	2,202,680	211	14,670,576	*1,793	17,797,883

The information is given in detail with respect to each district in which not less than 100,000 are depastured. Of the 1,793 holdings, 554 comprised less than 50 sheep, probably chiefly sheep in butcher's paddocks awaiting slaughter. Nearly an equal number—529—were held in flocks of from 50 to 1,000. There were 275 holdings of from 1,000 to 5,000, with an average number of 2,602 to each. Runs with 5,000 to 20,000 number 224, comprising 2,202,680, or an average of 9,833, whilst 14,670,576 sheep, or 82 per cent. of the total number, were still held in holdings exceeding 20,000 in number. There were 211 of these, which gives an average of 69,529 to each. The average in this group of holdings in 1896 was 80,915.

The average number of sheep to each holding during each of the past eight years has been as follows:—

Year.			1	No. of Owners		No. of Sheep.	Av	erage Size of Flocks.	
1890				849	10.44	18,007,234	111101	21,210	
1891			•••	1,018		20,289,633	4.00	19,931	
1892	ilba	ova of		1,496	e ( 0,0 )	21,708,310	fald.	14,511	
1893		0.035		1,440		18,697,015	day, to	12,984	
1894			•••	1,584		19,587,691	•••	12,366	
1895				1,637		19,856,959	(6.0.)	12,130	
1896	:	eq) ed		1,664	ed timi	19,593,696		11,775	
1897				1,793		17,797,883		9,926	

There were 29 districts in which the number of sheep exceeded 100,000, and 6 in which the number was upwards of 1,000,000.

#### SIZE OF HERDS.

There is, of course, a far larger number of persons holding cattle than sheep—in fact, considerably more than ten times as many; but, if owners of under 101 head are excluded, it leaves only 2,575 persons owning upwards of 5,500,000, or 93 per cent. of all the cattle in the colony.

Information as to the ownership of cattle grouped in accordance with the number to the holding is contained in the following table:—

Petty Sessions District	. Owners.	1 to 100.	Owners.	101 to 300.	Owners.	301 and upwards.	Total Owners.	Total Cattle
	69	2,327	8	1,541	13	116,439	90	120,307
Banana	37	656	5	696	23	99,259	65	100,611
Boulia	9	236	1	300	24	192,825	34	193,361
Bowen	121	2,526	13	2,466	28	131,798	162	136,790
urke	9	262	1	200	21	211,428	31	211,890
	21	830	7	1,457	28	117,454	56	119,741
charters Towers	206	6,873	21	3,785	26	114,281	253	124,939
Clermont	140	4,588	30	5,015	40	174,281	210	183,884
loneurry	23	682	10	1,669	22	345,517	55	347,868
themidre	30	771	23	4,660	15	109,162	68	114,593
armdah	114	2,693	6	1,081	23	142,076	143	145,850
Jadetone	203	4,640	28	5,828	39	98,373	270	108,841
Turchenden	97	2,423	7	1,320	35	291,313	139	295,056
Tacker	795	13,597	37	6,336	39	133,668	871	153,601
Litchell	80	1,534	5	843	30	98,057	115	100,434
Jorman	8	138	4	727	22	195,588	34	196,453
colkhampton	EOE	15,262	99	16,602	97	200,560	791	232,424
+ Taurongo	977	1,290	6	1,060	30	140,244	73	142,594
nninggung	0.0	2,389	10		33	143,148	139	147,188
0.110.0200	ETT	939	7	1,651	25		89	140,770
harmamindah	00	848		1,204	25 26	138,627	53	
Tindonah	177		5	879		302,718		304,445
Vinton	95	776	2 5	270	21	175,906	40 55	176,952
Il other Districts		991		1,058	15	135,051		137,100
n other Districts .	18,046	361,013	931	162,749	629	1,629,559	19,606	2,153,321
Totals	20,867	428,284	1,271	223,397	1,304	5,437,332	23,442	6,089,013

Particulars have been furnished with respect to districts comprising 100,000 head of cattle and upwards; these number 23, the greatest number in any one district being found in Cloncurry. In some of the districts the holdings are very large, as will be seen from the average number of cattle to each run in the following districts:—Burke, 6,835; Cloncurry, 6,325; Norman, 5,778; Thargomindah, 5,744; and Boulia, 5,687.

#### LIVE STOCK.—PROPORTION TO AREA AND POPULATION.

The question is at times asked, "What is the carrying capacity of the Queensland pastures?" This would be a most difficult question to determine. It is not one that has forced itself into notice, as the live stock at present in the colony certainly fall far short of the number for which there is room. In the early days it was commonly believed that large areas of the interior—of which but little was then known—consisted of desert quite useless for grazing purposes. The fallacy of this has been since fully proved, and Queensland, every part of which is now explored, besides comprising vast areas of agricultural soil of unsurpassed fertility, is beyond question one of the finest pastoral countries in the world, the proportion of land in normal seasons unfitted for the depasturing of live stock being comparatively small. Before the discovery of the subterranean source which furnishes the supply of artesian water, it is true that much of the Western portions of the colony formed very precarious sites for cattle stations and sheep runs, for, often whilst the grass was plentiful, much of it could not be availed of for want of water. At the present time the number of cattle and sheep, as compared with most other countries, is out of all proportion both to the area and the population, being relatively small with respect to the former and excessive as regards the latter.

The proportions of each kind of live stock per square mile and per capita at the end of 1897 in each of the three great divisions of the colony are shown in the following statement:—

	Southern	Division.	Central	Division.	Northern	Division.	Cole	ony.
Ture some to late the server of the server o	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.	Square Mile.	Per Capita of Population.
Horses	1·09 11·49 36·12	0.69 7.26 22.82	0.63 8.62 40.45	2·29 31·28 146·75	0·47 7·52 7·13	1·24 19·64 18·62	0·72 9·11 26·62	0·99 12·56 36·72
All kinds in terms of Sheep Pigs	161.96	102.32	132:99	482·46 0·17	87.08	227·38 0·14	124:88	172·23 0·23
All kinds, including pigs, in terms of Sheep	nask son. Hot sig	102.58	ricesig sar rgava	482.63	engino ai Jahings :	227.52	lingtons' Six no	172.46

Converting horses and cattle into terms of sheep, on the basis of one to ten, it is seen that there are 125 sheep to each square mile of country, or a little more than five acres to each sheep. As the proportions in Victoria and New South Wales are about one and a-half acres and two and a-third acres respectively, it will at once be seen that there is ample room for expansion in the number of live stock before the grazing capacities of the natural pastures are fully taxed.

The number of live stock to each 100 inhabitants of some of the pastoral countries of the world is, according to Mulhall, as follows :-

ording to Extinuity as rollows				Horses.	Cattle.	Sheep.	Pigs.
Europe				11	30	58	15
United States				25	75	68	69
Canada				23	80	54	25
Argentine				120	605	1.860	11
Uruguay				110	1.140	1.800	5
Australia				40	250	2,600	30
The numbers for Queenslan	d for	1897	were-	200			
Queensland				99	1,256	3,672	23

#### DAIRYING, &c.

For convenience the production of honey, pork, and bacon has been classed along with dairying, as these commodities are largely connected with, although not strictly belonging to, that branch of the farming industry. Of the various products thus embraced, there was, for the most part, an increased outpus during 1897, although such was not the case with respect to butter and pork, there being a slight decline in the quantities of these articles made during the year.

In the following table will be found full particulars as to the production of butter, cheese, honey,

pork, and bacon during last year:-

	But	eter.	Hone	y.	Cheese.		Bacon		
Petty Sessions District.	Producers.	Lb.	Hives.	Lb.	Lb.	Pigs Slaughtered.	Fresh Pork, Lb.	Salt Pork, Lb.	Bacon and
A 11	133	185,843	4.4	1,342	96,476	404	3,872	7,400	42,813
Allora	155	83,629	243	8,210	64,315	285	480	1,400	34,289
Beaudesert		1,362,372	1,385	89,982	10,920	38,076	359,421	14,481	2,930,054
Brisbane	255 235		265	10,920	230	609	13,865	13,925	35,016
Bundaberg	69	164,560		46,612	38,640	1.10	1,240	452	6,632
Caboolture		86,635	1,065	6,420		669	39,631	4,450	6,410
Clermont	23	21,909	75		52,298	215	580	1,624	24,594
Crow's Nest	28	22,393	292	16,442	148,806	302	1,480	3,372	35,977
Dalby	55	25,330	56	2,915	43,869	380	490	725	89,622
Esk	127	67,545	256	10,485		1,677	6,340	34,519	119,754
Gatton	138	79,186	250	13,239	11,756 4,010	436	12,374	100	37,841
Gympie	97	110,994	403	32,941		923	5,371	2,575	93,594
Harrisville	140	63,280	442	10,526	633,578	486	175	1,045	80,781
Highfields	143	65,017	220	15,904	104,519		39,311	3,036	49,829
Ipswich	128	317,177	359	13,584		919		986	29,138
Killarney	83	29,795	806	75,622	5,650	276	1,707	24,963	85,750
Laidley	169	40,183	675	15,821	24,334	1,136	9,465	12,680	63,233
Logan	226	137,796	2,192	78,179	7,116	1,278	38,836		31,711
Marburg	40	108,439	681	10,450	1,100	614	21,105	20,516	
Maroochy	81	38,651	1,310	81,128	2,438	341	2,660	9,592	27,217
Maryborough	150	109,989	584	21,520	5,580	550	18,762	3,340	40,861
Nerang	76	65,005	1,334	44,773	3,288	283	10,780	2,020	22,775
Redcliffe	132	299,679	565	27,495	21,287	481	31,269	240	10,395
Rockhampton	128	151,910	610	57,561	33,522	1,740	34,977	6,990	116,881
South Brisbane	94	780,854	526	40,023	526	11,410	34,458	5,242	1,206,042
TI:	84	98,906	185	9,610	114,649	669	42,239	5,462	29,044
m 1	342	707,708	214	6,047	502,064	3,726	6,621	12,265	302,283
WWT . 1	179	105,027	579	33,982	330,508	2,155	2,351	3,081	174,618
XXX 10 1	42	38,022	147	7,830	5,410		1,800	500	3,890
All Other Districts	660	318,153	3,415	133,611	24,527	6,512	223,539	29,165	372,441
Total, 1897	4,212	5,685,987	19,178	923,174	2,291,416	76,719	965,199	226,146	
,, 1896	4,237	6,164,240	15,165	710,697	1,921,404	67,034	932,984	287,050	5,008,726

N.B.—This Table includes the products of both factories and small makers.

Detailed information is given in the above table respecting all districts in which the industries in question assume considerable importance. Particulars respecting the remainder of the colony are comprised in the bottom line of the table, the specific inclusion of a district being determined by

the gross assumed value of all the products above a minimum standard.

BUTTER.—This, the first product on the list, has assumed great prominence. Since the introduction of highly improved scientifically worked mechanical appliances has become an essential of successful butter manufacture, the ultimate removal of butter-making out of the hands of the farmer is only a question of time. The necessity for equality and economy of production will, amongst other things, bring this change about; and the farmer's article of commerce will be milk, or, at the most, cream. A few years since the idea of butter assuming importance as an article of export was very remote, the production being limited to the partial supply of local demands only, and these were frequently met by the purveyance of an article greatly inferior to the product now universally to be obtained. In consequence of the improved methods of manufacture, and the facilities offered by the inauguration of a number of central factories, the output of butter has greatly increased, and the requirements of the home consumption more than met; so that there is every prospect of butter soon assuming a prominent

place amongst the exports of the colony.

A few trial shipments have already been made to the United Kingdom, some of them with conspicuous success. In 1897 one consignment in particular proved most satisfactory, its quality being excellent; and it was, moreover, landed in fine condition, not having suffered on the voyage. Some of the more recent shipments would appear to have been hardly so satisfactory, although the opinions of experts varied considerably as to the quality and condition of the butter. The weight of evidence would, however, appear to justify the conclusion that greater care might with advantage be exercised with respect to a number of details. Unevenness of quality was generally admitted even in samples from the same factory; and as this is a condition calculated to reduce the price of the whole parcel to the value of the inferior article, it is a most important point for the producer to keep in view. So keen is the competition for the home markets that, if Queensland is to secure her legitimate share in supplying the requirements of the United Kingdom, the greatest care will have to be exercised on every point, both of the manufacture and of the shipment.

There was a reduced production of butter last year, the amount made in 1897—namely, 5,685,987—being nearly 500,000 lb. below the output for 1896. Considerable difficulty has been experienced in defining a "butter factory," and this year a somewhat wider scope has been given to the term, which is now deemed to include any establishment in which not less than a given quantity of butter is turned out from "separator" extracted cream. There were 164 establishments which fulfilled the required conditions last year; of these 36 employed other than animal power aggregating to an equivalent of 183 horses. The hands employed in the whole 164 factories numbered 658; there were 10,892,908 gallons of milk operated upon, from which 3,477,878 lb. of butter and 1,897,272 lb. of cheese were obtained. Passing the cheese for the present, and deducting a proportionate quality of the milk, it would appear that the factories required 8,995,636 gallons of milk to produce their 3,477,878 lb. of butter, or 2.59 gallons to each pound. The remainder of the butter production has been divided into butter made in small quantities from "separator" cream and that made from skimmed cream. There were 94 farmers who came under the former category, turning out 318,720 lb. of butter and 14,654 lb. of cheese, and 3,975 under the latter, who made 2,117,214 lb. of butter from skimmed cream.

The great advantage derived from the manufacture of butter in bulk at central factories is well illustrated by the different quantities of milk required to make each pound of butter by operators on a large and small scale respectively. The former require 2.59 gallons, as previously shown, whilst the 94 proprietors who worked with a separator required 304,066 gallons of milk to make 90,895 lb. of butter—an average of 3.35 gallons, or 0.76 of a gallon, in favour of the larger factories, a waste of milk equivalent to 29 per cent. This was on a very small quantity only; but if so relatively large a loss is possible where the separator was used, what must have resulted during the production of the 2,117,214 lb. of butter made from skimmed cream? That some butter should be made after the old-fashioned manner, in places and under conditions where a separator could not be profitably employed, is inevitable; but it is somewhat surprising, in view of the great advantage which has been so fully demonstrated as to its use, that the separator should not be even still more largely availed of. Thirty-eight per cent. of the total butter production of the colony was made from skimmed cream; in 1895 the proportion was 77 per cent., and in 1896 47 per cent.

The reduced output for 1897 occurred chiefly in the large factories in North Brisbane, in which district, in 1896, 2,199,124 lb. of butter were produced against 1,362,372 lb. only last year, although the number of producers slightly increased. In the district of South Brisbane, on the other hand, there was a considerable increase in the latter year, both in the number of producers and also in the output—namely, from 63 of the one and 429,117 lb. of the latter, in 1896, to 94 and 780,854, respectively, in 1897. There were also substantial increases in Ipswich, Redcliffe, and Rockhampton. The foregoing table, of course, relates to the district where the butter is made, and, as has been previously pointed out, the industry, in common with others connected with agriculture, such as the grape and the sugar, has changed its character of late years; and the marketable commodity evolved is now frequently manufactured outside the area where the primary product is obtained. The consequence is that important dairying districts are not included in the table because the milk or cream is sent elsewhere for manufacture. The only way to obviate this difficulty will be to credit the districts of origin with the milk or cream obtained, and to treat butter manufacture as a secondary industry, outside of agriculture.

Efforts have been made to obtain this information, but it involves the employment of a somewhat complicated form, which has not been filled up satisfactorily in some instances. This common initial difficulty will be overcome and more complete information secured in future years. The following figures, showing the amount of cream returned as sent out of some of the more important districts for manufacture into butter elsewhere, may be accepted as approximately correct. The information is in addition to the cream turned into butter within the boundaries of the district itself, and the inquiry is limited to districts exporting not less than 50,000 quarts of cream during 1897:—

	Q1 sen	uarts of Cream t out of District.		Q sen	uarts of Cream t out of District.
Marburg	 	269,270	Laidley		104,759
Rosewood	 	210,492	Dugandan		103,233
Beaudesert	 	193,427	Ipswich		
Allora	 	165,072	Highfields		
Warwick	 	158,949	Esk		71,786
Gatton		151,536	Harrisville		69,356
Logan	 	112,023	Nerang	•••	56,591

This list shows why districts, which comprise a large number of dairy cattle among its live stock, did not make enough butter to reach the minimum required for inclusion in Table G. Thus, for instance, Rosewood and Dugandan are excluded. Had the cream been made into butter in situ instead of being sent away, not only would other districts exporting less than 50,000 quarts of cream have been raised to the standard required by the table, but the butter production of some of the districts quoted would be greatly reduced to swell the output of others; and so the advisableness of returning the product of the dairy farmer in the original form of milk is fully borne out.

For the first time in the history of the colony the exports of butter exceeded the imports. There were sent away, during 1897, 425,690 lb. of butter, valued at £16,771; and the imports amounted to 237,882 lb., worth £11,498. It was remarked in the report for last year that there were probably large stocks of butter in hand at the beginning of 1897—the facilities which now exist for cold storage to a large

extent removing it out of the category of quickly perisbable commodities. There is little doubt that such was the case, and—although dry weather was the chief factor—this may have contributed to a reduced production, and resulted in the conversion of a larger proportion of the milk into cheese.

The experience of several years showed that the consumption of butter was about 11 lb. per capita of the population. On this basis there would be absorbed about 5,330,000 lb., leaving as in stock at the end of 1897 a larger amount than at the commencement of the year. It is therefore probable that the opportunities now available for obtaining a reliable article at a fixed price has resulted in an increased consumption, which may now be assumed to be not less than from 12 to 13 lb. per head.

Honey.-In common with like efforts with regard to many other exportable products of the colony, the earlier attempts to introduce Queensland honey to the markets of the United Kingdom have met with indifferent success, chiefly due to a want of knowledge on the part of exporters. The peculiar flavour imparted by the Eucalyptus blossoms to much of the honey was at one time a recommendation, the honey possessing this being considered to have anti-febrile qualities. On this becoming known, unprincipled persons endeavoured to secure this flavour by mixing the honey with extract, frequently overdoing it; now, Eucalyptus honey is at a discount in the home markets. There is, however, no difficulty about abtaining all the first arrest and competent expects have expressed the difficulty about obtaining plenty of honey suitable for export, and competent experts have expressed the opinion that Queensland honey has been landed in London superior to any, except, perhaps, the very opinion that Queensland honey has been landed in London superior to any, except, perhaps, the very best English article; and a large consumer has expressed himself prepared to take considerable quantities at a price ranging from £1 4s. to £1 5s. per cwt. f.o.b., Brisbane. A prominent apiarist is now engaged in securing the co-operation of other producers with a view of shipping regular consignments to England, so that the export of this commodity may be expected to rapidly expand.

There were 19,178 hives returned last year against 15,165 in 1896, an increase in the former year of 4,013. The increase in the honey production was proportionately even a fraction better, the average yield of honey in 1896 being 47, and in 1897 48, lb. to each hive.

Taking districts in which the number of hives exceeded 1,000, or the output of honey exceeded 50,000 lb. great differences are found as to the average yield obtained from each hive. The following

50,000 lb., great differences are found as to the average yield obtained from each hive. The following statement gives this information for the more important districts, which were seven in number:-

nizhia a da -	Lb.		Lb.		Lb.
Killarney	 94	Rockhampton	 94	Brisbane	 65
Maroochy	 62	Caboolture	 44	Logan	36
Nerang	 34			0	CONTRACTOR OF

CHEESE.—The increase in the output of cheese during 1897 amounted to rather more than 19 per cent. on the figures of the previous year, and exceeded one-third of a million pounds. There were 31 factories in which the manufacture of cheese was carried on; in 15 of them the production was combined with that of butter-making. The output of cheese at these establishments was 1,897,272 lb., or 83 per cent. of all cheese made during the year. The production has now equalled the home demand, as, practically speaking, there was no cheese either imported or exported last year, the actual figures being imports 17,705 lb., and exceeded. being-imports, 17,795 lb.; and exports, 3,268 lb.

The principal sites of cheese production are at Harrisville, Toowoomba, and Warwick, where 633,578 lb., 502,064 lb., and 330,508 lb. were made respectively. Considerable quantities were also made at Dalby, Tiaro, and Highfields. The consumption of cheese in Queensland is very small, not quite 5 lb. per head, an amount greatly less than that obtaining in most countries, so that this article of diet might be utilised to a much greater extent than is now the case, with benefit to the consumer and producer alike. One large factory in the Caboolture district has been closed down, the milk which was formerly

converted into cheese now being sent by rail to Brisbane.

Bacon, &c.—A large expansion in this item of dairy production took place during 1897. There were 10,000 more pigs slaughtered, and upwards of 1,000,000 lb. more bacon and ham cured. These figures are exclusive of those killed by butchers. There was, on the other hand, rather less pork turned out, the increase of 32,215 lb. of fresh pork being more than counterbalanced by a decrease of 60,904 lb. of salt pork. Of the 76,719 pigs thus killed for food during 1897, 49,503 were slaughtered at factories, turning out 4,452,280 lb. of bacon and ham, or 73 per cent. of the total of 6,103,485 lb. cured during the The average dressed weight of pigs killed at factories was 90 lb, the mean for the whole colony not quite 80 lb., or 10 lb. lighter. There were nine establishments engaged in the slaughter and being not quite 80 lb., or 10 lb. lighter. There were nine establishments engaged in the slaughter and preservation of hogs; five of these, however, were only in a very small way of business, the number dealt with by each not exceeding 1,000.

In addition to the 4,452,280 lb. of bacon turned out as already quoted, 167,743 lb. of lard were also produced, besides a considerable quantity of by-product returned as tallow, not being an edible pig fat. Nearly 50,000 of all pigs converted into bacon, &c., were slaughtered in the petty sessions districts of Brisbane or South Brisbane, where the two largest of the factories are situated. Nearly one-third of the fresh pork put on the market was supplied from the former district, the one on the south side of the river turning out a larger proportion of bacon. There would appear to be great differences in the average weight of the hogs slaughtered in the various localities, as will be seen from the following

statement, which relates to all districts in which the number killed exceeded 1,000:

villari promas origi	Lb.			Lb.			Lb.
South Brisbane		Laidley	 	106	Gatton	1000	96
Rockhampton	91	Logan	 	90	Brisbane		87
Warwick	01	Logan	 •••	90	Brisbane		81

The large porprotions of pork and bacon turned out by the factories of North and South Brisbane respectively explain the great difference between the weight of hogs killed in those districts. The very light average weight of the animals at Warwick cannot, however, be due to the same cause, as the ratio of bacon to pork in that district is equal to 37 to 1; whilst in the district of South Brisbane, where the average weight is 30 per cent. greater, the proportion of bacon to pork is as 30 to 1 only. In Laidley, besides, where the average weight was nearly as great as in South Brisbane, the bacon cured only exceeded the pork by two and a-half times.

#### AGRICULTURE.

One of the most satisfactory circumstances in connection with the progress of the colony is the marked increase in the area brought year by year into cultivation. The season of 1896 witnessed, up to that date, the greatest expansion in the quantity of land brought under the plough then recorded, but the great advance made in that year was surpassed in 1897; the 49,484 additional acres farmed last year being actually and relatively the largest increase in the history of the colony, amounting to an accession

on the area for 1896 of 14.69 per cent.

There were 386,259 acres under cultivation, 14,402 acres in fallow, and 371,857 acres under crop in 1897. Of the area under crop 30 per cent. was under maize, exclusive of the area used for green food; 27 per cent. under sugar; 16 per cent. under wheat for grain; and 13 per cent. under hay crops of various kinds. These four different items thus absorbed 86 per cent. of the total area cropped during

to our imports.

Although it is most satisfactory to witness the increased interest now accorded to the farmer's art, yet a large field for expansion still awaits the agricultural industry. Without taking into consideration such products as, lending themselves readily to export, would be capable of large additional output, there was last year upwards of one million pounds worth of agricultural commodities imported into the colony, which could have been grown here.

The values of the imports of agricultural products which could be grown in Queensland, for each

of the past five years, are given in the following statement :-

007,02 888	Value of—			1893.	1894.	1895.	1896.	1897.
Frain, &c., and Variant, &c., and &c.,		thereof	209 J	£ 495,418 85,975 58,435 84,412	£ 432,237 89,141 61,936 101,963	£ 453,627 84,652 51,413 102,775	£	£ 649,253 121,843 88,562 161,549
0184 000				724,270	685,277	692,467	1,000,998	1,021,207

Increase value in 1897 over 1896, £20,209.

From this, comparing the figures of the past two years, it will be seen that the total value of such imports amounted to rather more in 1897 than in 1896, "Fruit" and "Other Products" showing increases, and "Grain" and "Vegetables" decreases. The chief articles comprised in the first line of the statement, which aggregated some £30,000 less in 1897 than in the preceding year, were:—Wheat, £95,111; flour, £410,036; malt, £52,292; malting barley, £5,952; rice, £44,204; and oats, £15,689.

"Vegetables" included £61,102 for potatoes and £20,490 for onions; chaff, £27,251. Tobacco and hops were the principal commodities amongst miscellaneous products. Why some of the articles mentioned should be imported annually in such large quantities seems difficult of explanation. This

mentioned should be imported annually in such large quantities seems difficult of explanation. This anomaly is rapidly being removed with respect to breadstuffs, which are by far the most prominent factors iu the problem; but malt, potatoes, chaff, and omons can be produced, and yet they still so largely contribute

The expansion in the cultivation has been chiefly within the areas where agriculture has been for some time established, and 1897 did not witness so large an increase in some districts as was anticipated. The fertile lands of the Nogoa and Comet, as well as the Upper Burnett, are undoubtedly destined at an

early date to add largely to the acreage under the plough

In the vicinity of Gayndah several areas, each estimated to contain from 80,000 to 100,000 acres of soil of unsurpassed quality, have been definitely located, whilst the downs to the west of Rockhampton comprise large expanses well suited to the growth of cereals; and around Stanthorpe are to be found practically unlimited quantities of land fitted for the cultivation of stone and pip fruits.

A conference of farmers has recently been held at Rockhampton, the Honourable the Secretary for Agriculture presiding, at which a large number of questions of moment to the agricultural interest were considered and discussed; the following suggestions amongst others meeting with general approval:—That the Government should make provision to facilitate the placing of dairy produce in the markets of the United Kingdom, and also provide markets in the principal towns of the colony; appoint official inspectors to grade and mark butter intended for export, and to inspect dairy herds with a view to the destruction of discussed animals also that forever should account a second animals also that forever should account a second animals also that forever should account a second animals also for their destruction of diseased animals; also that farmers should co-operate so as to secure a better sale for their products in the markets of the colony.

### AREAS OF FARMS.

Not only, as already referred to, was there a large addition to the area cultivated in 1897, but an investigation of the returns points to a fair increase in the number of cultivators, although the latter was not so great as the increase in the area brought under the plough.

The following statement furnishes information on both these points for the past five years; also classing the farmers and farms into groups according to the area of the cultivation on the holding:—

		NUM	BER OF CULTIV	ATED AREAS IN	EACH GROU	UP.DE		TOTAL AREA CI	ULTIVATED IN E.	ACH GROUP.	
,	Year.	5 acres and under.	Above 5 acres and not exceeding 20.	Above 20 acres and not exceeding 50.	Above 50 acres.	Total.	5 acres and under.	Above 5 acres and not exceeding 20.	Above 20 acres and not exceeding 50.	Above 50 acres.	Total.
894		 2,711 3,052 2,993 2,922 2,847	4,616 4,707 4,844 5,011 4,938	2,724 2,910 3,132 3,560 3,770	890 1,039 1,069 1,333 1,803	10,941 11,708 12,038 12,826 13,358	6,342 8,197 8,138 8,269 8,604	50,901 55,863 57,970 60,660 60,902	80,343 90,596 96,843 110,402 118,363	114,489 129,896 136,327 157,444 198,390	252,075 284,552 299,278 336,775 386,259

One feature of interest disclosed on an analysis of the details relating to each size group is the increase in 1897 in the mean area cultivated in all except the one exceeding 50 acres. This justifies the conclusion that for the most part the farmers established in 1896 were prospering and adding to the cultivated areas of their farms. The average area of cultivation on all the farms in the colony advanced by more than  $2\frac{1}{2}$  acres.

There were 10,941 persons occupied in the cultivation of the soil in 1893, and 13,358 in 1897, or an increase in the four years of 22 per cent.

The area, however, increased during the same period at a greater ratio—namely, from 252,075 acres to 386,259 acres, or a proportian of 53 per cent.

The following table furnishes information on this point with respect to all districts in which not less than 1,000 acres were cultivated:—

H.

									R CULTIVA				
	y Sess			5 Acres as	nd under.	Above 5 exceeding	and not 20 Acres.	Above 20 exceeding	and not 50 Acres.	Above	50 Acres.	Tota	ls.
				Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.	Owners.	Acres.
* 1									0.504	230	26,691	333	29,750
Ilora				2	5	23	330	78	2,724		7,426	62	8,123
LVr				3	10	8	106	18	581	33	555	237	3,821
Beaudeser				49	135	114	1,309	66	1,822	8	381	100	1,765
Bowen				14	49	59	686	22	649	5	65	626	5,065
Brisbane				283	843	295	2,995	47	1,162	1 1		404	26,324
Bundaber				16	58	117	1,481	159	5,229	112	19,556 58	115	1,236
Cabooltur				44	142	55	605	15	431	1		173	8,850
Cairns				26	92	39	484	52	1,654	56	6,620		14,688
Childers				18	58	65	920	138	4,849	80	8,861	301	
Crow's Ne				31	107	141	1,868	80	2,491	3	244	255	4,710
				54	158	134	1,491	53	1,555	21	1,306	262	4,510
Dalby		•••		11	35	27	339	17	533	23	2,135	78	3,042
Douglas				15	48	126	1,742	205	6,264	17	1,161	363	9,21
Dugandar				70	157	83	952	51	1,543	14	955	218	3,60
Esk					113	236	3,199	248	7,819	59	4,492	579	15,623
Gatton				36		22	260	24	725	20	2,092	69	3,08
Gin Gin					10			13	404	3	181	57	1.00
Goodna				11	35	30	384		857	12	896	233	3.10
Gympie				88	264	104	1,087	29		26	1,982	320	8,67
Harrisvill	e			11	37	137	1,832	146	4,819		1,487	110	2,97
Herberton				28	100	37	484	29	908	16	2,622	398	10,81
Highfield				90	423	150	2,781	166	4,989	43		159	9,85
Ingham				10	38	43	680	37	1,250	69	7,891	260	4.08
Ipswich				01	232	109	1,342	60	1,821	10	685		7.25
Killarney				177	49	33	395	42	1,366	43	5,440	135	
Laidley				0	27	106	1,466	239	7,496	72	5,834	426	14,82
			• • • •	0.4	256	220	2,781	71	1,647	10	677	385	5,36
Logan				FE	177	211	2,958	255	8,304	165	18,308	686	29,74
Mackay				10	48	93	1,372	189	5,580	15	1,260	313	8,26
Marburg					288	146	1,462	22	645	2	179	265	2,57
Maroochy				. 95	356	149	1,666	43	1,244	6	680	308	3,94
Marybor	ough			. 110		10	1,000	9	333	13	1,599	34	2,06
Mitchell				. 2	6		931	43	1,271	38	4,069	177	6,35
Mourilya				. 19	83	77	538	25	674	3	226	86	1.48
Nanango					44	46			1.667	22	1,754	195	4,51
Nerang					103	87	993	52	1,812	16	1,127	240	4.7
Redcliffe				. 32	95	131	1,685	61	1,812	18	1,127	287	4,2
Rockham				. 93	261	129	1,403	47	1,466			208	5,8
Roma	Prom			90	116	69	869	57	1,847	43	2,985	229	5,4
Rosewoo				177	64	88	1,211	114	3,528	10	606		2,7
South B				00	219	99	1,139	36	1,086	5	350	229	
				177	47	25	265	17	606	1	109	60	1,0
Texas				20	97	106	1,272	63	1,895	17	1,049	218	4,3
Tiaro	,			0.40	926		4,868	361	12,179	211	27,568	1,318	45,5
Toowoon				348	920 85		1,381	142	4,775		22,855	496	29,0
Warwick				36			365		793		145	88	1,4
Yeulba				27	99				3,070		2,121	1,263	11,5
Other D	istrict	s		721	2,009		4,397						386,2
Тот				2,847	8,604	4.938	60,902	3,770	118,363	1 803	198,390	13,358	000,2

In 44 districts the area of cultivation was sufficient to bring it within the standard of particularisation. The aggregate acreage under plough in these districts was 374,662 acres, or 97 per cent. of the total cultivation. In the great sugar and wheat districts of the colony, such as Allora, Bundaberg, Mackay, Toowoomba, and Warwick, a large proportion of farms exceeding 50 acres under plough were found. Of farms, if such they can be called, on which the cultivation is less than 5 acres in extent, a large number are comprised in the districts of Brisbane, Toowoomba, and Maryborough.

The centesimal increase in the number of farms and of the area farmed in each group during 1897 was as follows:—

Group.	Centesimal Increase in number of Farms.	Centesimal Increase in Area Cultivated.
5 acres and under	-2.57	 4.05
Above 5 and not exceeding 2	20 acres — 1·46	 0.40
Above 20 and not exceeding		 7.22
Above 50 acres	35.26	 26.00
	<del></del>	
Total	4.15	14.69
	— Decrease.	

Next to the proportionate increase in the group of farms of the largest size, which has already been referred to, the advance has been with farms of from 20 to 50 acres; and, unlike those of 50 acres and upwards, the ratio of progress of area has been greater than that of number.

The mean size of cultivated area of each group for the past five years was as follows:-

		5 Acres and under.	5 to 20 Acres.	20 to 50 Acres.	50 Acres and Upwards.	Total.
1893		 2	11	29	129	23
1894		 3	12	31	125	24
1895	.nicaporto	 3	12	31	128	25
1896		 3	12	31	118	26
1897		 3	12	31	110	29

The increase in the average size of all farms is thus seen to be annually expanding. The advance for 1897 was, moreover, the best recorded during the period.

# LABOUR AND MACHINERY ON FARMS.

Information as to these particulars was collected this year for the first time, the necessary questions being added to the agricultural schedules. These were very fairly responded to by the farmers, and the collectors, for the most part, took an intelligent view of the subject, and consequently the information was more complete than is sometimes the case with a first attempt.

The particulars scheduled included the number of males and females engaged in work upon the farm, distinguishing between the employer and his family and hired help; also the aggregate value of machinery and implements employed. This has been compiled in districts, but as, for reasons already given, it is not quite so complete as in future years it may reasonably be expected to become, the totals in each of the great divisions of the colony are alone published:—

Division.		Employer	and Family.	Hands E	mployed.	Value of Machinery
Division.		Males.	Females.	Males.	Females.	and Implements,
Southern	 	17,146	5,783	7,611	803	423,664
Čentral		779	262	626	50	35,555
Northern	 	2,412	345	7,200	200	246,640
Total	 	20,337	6,390	15,437	1,053	705,859

#### IRRIGATION.

Notwithstanding the importance that of necessity attaches to the question of irrigation in a tropical and semi-tropical country such as Queensland, yet hitherto the matter has never received the attention which it merits. The cultivation line is only now just beginning to spread to the westward a sufficient distance from the seaboard to render the subject a pressing one. Although at times, even in the coastal districts, periods of dry weather are experienced, yet such droughts fall far short of the intensity with which they visit the far interior of the colony, and which will, as these latter areas are brought under the plough, resolve the problem into a question of paramount importance. This absence for the most part of continued drought in the localities where agriculture has chiefly prevailed, combined with the customary yields which are returned to the hands of the farmer from the very fertile lands of the colony, has been the cause of relegating irrigation on a scientific and comprehensive basis to only a passing consideration. Under the pressure of dry seasons the question has been mooted, to be dropped with the first shower of rain. Matters at one time went so far that preliminary investigations as to suitable sites were instituted, but these were only pushed sufficiently to prove that in several places large areas of good land were available, so situated as to offer every facility for the conservation and application of water under most favourable conditions.

Whilst irrigation, in the sense in which the term is generally understood, forms no part of the curriculum of agriculture as pursued in this colony, yet the use of water artificially applied as an aid to the growth of crops is not entirely dispensed with. A considerable area of cultivation is each year brought within the sphere of its influence.

Returns have been collected on this subject since 1891, so that information on this head is now available for seven years, and particulars respecting it will be found in the following statement:—

Year.	an kart		Ac	eres Irrigated.	Year.		Acre	es Irrigated.	
1891		 		3,869	1895	 •••	 	6,447	
1892		 		3,840	1896	 	 	6,395	
1893		 		5,287	1897	 	 	6,647	
1894		 		5,846					

Thus, within the period under review, the area has very nearly doubled; the returns for 1897 comprising the largest acreage irrigated recorded in any one year.

The experiences of the cultivators who availed themselves of this aid to their work, as returned on their schedules, are well nigh unanimous as to the fact that the labour and outlay incurred was amply repaid in the increased production of the soil so treated.

The following table gives full information on the question of irrigation in each of the districts from which returns were received:—

I.

			IRRIGA	TION.	
Petty Sessions District in which situated.	Acres Irriga- ted.	Original Source of Water Supply.	Means Employed for Procure- ment and Utilisation.	Crops Treated.	Remarks by Irrigator.
Adavale Augathella	3 4	Blackwater River Warrego River	Horse pump, drains Horse pump, whip and barrel,	Fruit, vegetables. Grapes, vegetables	Source of water supply affected by
Ayr	5,165	Wells, river, artesian, and lagoons	drains Steam pumps, centrifugals, fixed and portable engines, open trenches and flumes,	Sugar-cane, maize, potatoes, and general crops	drought. Without irrigation crops would have been very poor; but for irrigation could not be profitably grown in this district.
Banana Barcaldine	172	Dawson River Alice River, artesian	and by flooding Windmill, pipes Steam pump, gravitation, drains	Fruit trees. Oats, maize, wheat, vegetables,	Rainfall would have been useless without.
Blackall	57	Barcoo River, artesian	Pumps, gravitation	Fruit trees, vegetables.	odi in Jeanna Fodi
Bowen	138	Don River, wells,	Steam and horse pumps, wind- mills, gravitation	Fruit trees, vegetables, coffee and general crops	Crops better on account irrigation.
Brisbane	43	Creeks, wells	Steam pump, windmills, gravi- tation, pipes, hose, and flooding	Fruit trees, vegetables	During winter time irrigation gives opportunity for earlier planting.
Cape River	22	Cape River, Betts Creek	Horse pumps, drains	Fruit trees, vegetables, oranges.	
Charters	16	Wells	Steam pumps, windmills, pipes and drains	Fruit, oats, vines, vegetables.	107 sp. floathrough
Charleville	22	YY . 11	Steam and horse pumps, gra- vitation, pipes and drains	Wheat, sorghum, fruit, and vegetables	Irrigation kept crops alive till rain fell.
Cleveland Cloncurry	29	Wells River, wells	Windmill, pipes Horse pumps, chain pumps, drains	Oranges, vegetables. Vegetables, &c.	I D. CTERNI PRI WAS INDICO COM
Cook Croydon	3 10	Spring Carron River, wells	and hose	Maize, potatoes. Potatoes, vegetables, fruit trees.	Caro, distinguishing Derne
Cunnamulla Esk	40 91	Artesian Lockyer and Cress- brook Creeks	Gravitation Steam pumps, calico hose, and 12-inch pipes	Wheat. Lucerne	Beneficial effects.
Emerald	10	Wells	Horse pumps, whip and barrel, drains	Grapes and fruit trees	Crops yielded more owing to irriga-
Etheridge	00 10	Gilbert River	Steam pumps, pipes, and trenches	Fruit trees, vegetables, maize	Crops not sufficiently advanced to make definite remarks.
Gatton	4	Lockyer Creek	Horse pump, pipes, and trenches	Garden.	maso domino romanas.
Gin Gin Herberton Hughenden	3 6 114	Duingal Creek Springs Wells	Steam pumps, trenches Gravitation, drains Steam and horse pumps,	Lucerne, garden, and orchard. Potatoes, vegetables, fruit trees Maize, sorghum, vegetables,	Excellent yield.  Less, owing to water supply failing.
Isisford	14	Barcoo River and	drains Horse and hand pumps, drains	fruit Oranges, vegetables.	Northern Service
Longreach Mackay	4 102	Thornleigh Creek Thompson River Lagoons, wells, creeks	Horse pump, drains Steam pumps, gravitation, pipes, trenches	Oranges, vegetables. Sugar-cane, orchards	Water supply affected by dry weather.
Maroochy Muttaburra	2 11	Dam Landsborough	Steam pump, pipes Steam and horse pumps, wind-	Strawberries. Fruit trees, vegetables	Dry season.
Norman	19	River, lagoons Lagoons	mill, drains, gravitation Centrifugal and horse pumps,	Vegetables.	
Ravenswood	4	Well	drains Steam pump, windmill, drains,	Fruit trees.	
Rockhampton	65	Scrubby Creek, wells, and river	pipes Steam pumps, piping, hose, drains, gravitation	Potatoes, lucerne, maize, vege- tables, oranges, vines	Land irrigated a success so far.
Roma	10	Bungil Creek	Steam pumps, piping, gravitation	Vegetables.	elises is upilly not asing
St. George	50	Balonne River, wells, Wallam Creek, artesian	Steam, horse and hand pumps, drains, pipes	Lucerne, wheat, vegetables, and fruit trees.	drainal comprehensition when
Springsure	4	Creek	Hand pump, gravitation, drains	Vegetables.	and their wall makes dies
Stanthorpe	45	Wells, springs, creek		Vegetables and fruit trees.	sender the plongs resorts
Bouth Bris-	19	Bulimba Creek	Steam pumps, trenches, pipes, taps	Fruit trees, vegetables, nursery stock	Very satisfactory.
rambo raroom	15 5	Barcoo River Dawson River	Horse and hand pumps, drains Windmill, pipes	Market garden. Fruit orchard	But for irrigation all fruit trees would have died.
Thargo- mindah	12	Bulloo River	Horse and hand pumps, drains	Fruit garden	Improved crops.
Thornborough Fownsville	2 149	Well Stewart's Creek, Ross River, lagoon and	Windmill, pipes Steam and horse pumps, wind- mill, gravitation, drains	Fruit trees. Fruit trees, sorghum, potatoes, vegetables.	
roowoomba	143	wells Condamine River, wells	Steam and pulsometer pumps, windmills, surface flooding,	Lucerne and rape.	
Windorah	4	Cooper's Creek	pipes Horse pumps, pipes	Grapes, potatoes.	
Total	6,647	Villag to north		r haggerich viouste is	

In 43 districts the water was artificially employed, to a greater or less extent, for purposes of agriculture. In 7 districts the area treated exceeded 100 acres, and in 4 more it amounted to at least 50 acres.

The premier district in this respect was Ayr, where no less than 5,165 acres were irrigated, or 78 per cent. of the whole. The sources of supply and the means of elevation and distribution are most varied. Although applied industry is sometimes employed for securing the water in an artificial reservoir, yet, for the most part, natural sources of supply in their primitive state are relied upon, rivers, creeks, and lagoons being much more in evidence in the returns than dams, wells, and bores. The latter are given as sources of supply at Ayr, Barcaldine, Blackall, and St. George. As to the first-named place, the supply is probably drawn from a tube well, but can hardly be from a true artesian source. Gravitation necessarily cannot often be used as the means of conveyance direct from the natural source of supply without the intervention of power to first raise the water, so as to secure a head. A great increase in the use of steam as the means of elevation is at once noticeable on comparing the returns for 1897 with those of previous years. Nearly every kind of crop grown, including vegetables and fruit, is to be found amongst the returns, but, inasmuch as Ayr contributes so large a proportion of the irrigated area, and the principal object of cultivation in the district is sugar-cane, that crop inevitably figures largely in the area submitted to irrigation.

#### AVERAGE YIELDS.

Detailed information respecting areas cultivated with each description of crop, and the results obtained in each district of the colony, are given in the tables to be found from No. VIII. to the end of the Appendix. A summary of this information, showing in certain geographical groups the average results obtained during 1897 from each of the crops cultivated, is given in the following table:—

Note of Main Range   .	Bast of Main Range   .
Past of Main Range   .	Bushels, B
West of Main Range       1922   980   21-77   25-48   29-14   18-04   24-56   24-56       750       750	West of Main Range   .
West of Main Range	West of Main Range          17-05         17-04         24-20         25-03         29-14         17-05         29-14         17-05         29-14         17-05         29-15         4-61         2-05         4-61         11-12         458-85         7-44         7-58         130-70         19-9         25-17         4-61         11-12         458-85         7-44         7-58         130-70         1-59         25-17         4-61         11-12         458-85         7-44         7-58         130-70         1-59         25-17         15-17         2-53         2-60           1-10-48          1-11         4-57         1-11          1-11          1-11          1-11          1-11          1-11          1-11          1-11          1-11          1-11           1-11            1-11
Total Southern 1689 1781 2400 2530 2914 1745 227 4481 112 45385 744 768 13870 1-99 2,64773  East of Main Range 1509 1225 1500 1686 1510 1.26 3:12 1.15 11943 1.20 1,34002  West of Main Range 467 816 3704 2942 2185 3571 2-61 376 0.50 183 27931 1-94 779143  Total Northern 467 816 816 811 2919 3571 2975 531 183 1000 050 183 27931 254 87056	Total Southern 1689 1731 2400 2530 2914 1745 227 4481 1112 45385 744 758 13679 1799 2,04773  West of Main Range 1504 2000 1514 1500 1746 311 1115 300 11943 1730 1,34002  Total Central 467 816 3304 2242 1501 1772 240 458 1150
West of Main Range        1.59       12.25       15.00       16.86        15.00       1.26       3.12       1.26       3.12       1.26       3.12       1.26       3.12       1.26       3.12       1.26       3.12       1.26       3.12       1.26       3.27       3.00        1.51        2.53       2.60          1.59         1.59	Past of Main Range       1504   1225   1500   1686     1500   1.26   312   1.15     300     11943   1.20   1.34002   1.34002     1504   2000     1514     1500   1.46   311   1.15     3.00     1.1943   1.20   1.34002   1.3400
West of Main Range	West of Main Range
Total Central 375 1380 1500 1682 1500 146 311 115 3004 2942 219 577 261 1682 270 178 178 178 178 1794 1794 1794 1794 1794 1794 1794 1794	Total Central 375 1380 1500 1682 1500 1.46 3:11 1.15 300 11943 1:20 1.58564  Teat of Main Range 467 8:16 32.25 21:85 35.71 2:61 3.76 0.50 10.00 0.50 1.33 27931 1:94 78143  Total Northern 1686 17:17 24:00 25:55 29:19 17:72 2:26 4:98 1:50 416:19 7:39 7:55 26:242 1:96 2,564:08
East of Main Range 4-67 8-16 82-25 21-85 85-71 2-61 85-77 5-81 1-83 10-00 0-50 1-83 279-31 1-94 791-43 Total Northern 4-67 8-16 31-11 29-19 85-71 2-87 5-81 1-83 10-00 0-50 1-83 279-31 2-54 870-56	East of Main Range
thern 467 816 31-11 20-19 35-71 2-81 6.31 1-83 10-00 0-50 1-33 279-31 2-54 870-56	Total Northern          4-67         8-16          31-11         29-19         35-71         2-61         37-6
4-67 8-16 31-11 29-19 35-71 2-37 5-31 1-83 10-00 0-50 1-83 279-31 2-54 870-56	Total Northern 4.67 8.16 81-11 29-19 35-71 2.37 5-31 1-63 10-00 0-50 1-33 279-31 2-54 870-56 16-86 17-17 24-00 25-55 29-19 17-72 2-26 4-68 1-50 416-19 7-39 7-55 262-42 1-96 2,564-06
	the state of the s

The question of how to treat the unproductive area of wheat is a difficult one. that this cereal is planted with the intention of securing grain, it is the practice to charge all the unproductive area to wheat for grain. This, when the season is a bad one, acts adversely on average yields recorded, and occasions a marked difference between that average and the average on acres reaped. This course is, I believe, pursued in most of the Australasian colonies. On the other hand, in the United States, I am informed, it is the custom to exclude the totally unproductive areas from the acreage cropped, treating them as fallowed land. This would of course reduce the total area under crop but not under cultivation. The averages given in the foregoing table relate to wheat for grain which includes the unproductive, and thus gives a lower average than if the yield were taken on the area reaped. In the column relating to oats it will be seen that the best yield was obtained from the Central division, in the group of districts lying to the west of the range, although the mean for the total Southern division exceeded that for the whole of the Central. The best returns from barley were obtained in the Darling Downs districts, although in the Southern division the average yield from the area to the east of the range was not much below the mean of the more inland districts. With maize, the highest average resulted from the crops of the districts of the Northern division, where also the yields of rice exceeded the averages of the Southern division by a fraction. The returns from cereals generally were not quite so good in 1897 as in 1896, but in the latter year the season was particularly favourable to grain crops. In potatoes, the English variety gave rather poorer results than in 1896, whilst, on the other hand, the sweet potato showed a slight improvement. Growers of tobacco were less successful in 1897 than in Growers of tobacco were less successful in 1897 than in 1896, the crop returning upwards of 1 cwt. less of dried leaf to each acre. Cotton has practically ceased to be an object of attention, as only 48 acres were under crop last year. Coffee, a tropical plant, naturally showed best results in the North, but this is no doubt partly due to the fact that the plantations in that portion of the colony are a year or two in advance of those of the South in point of age, and the trees are consequently nearer full bearing.

Hay crops, which comprise a conspicuous portion of the cultivation area, gave like results for the whole colony in both of the last two years. On each occasion the North gave better returns than either

the South or Central division.

Of fruit, grapes, bananas, and oranges gave rather poorer results than in 1896, pineapples showing better. The decline in the average yield obtained from grapes was especially marked in the Central division, whilst the return from bananas in the Southern division in 1897 was much better than in the preceding year; and the reverse was the case with respect to pineapples, the slight improvement in the average for the whole colony being due to better yields in the districts north of Gladstone. The crop of oranges in the Northern and Central divisions was more satisfactory than in the South, but not sufficiently so to redeem the total results from being much below the averages of immediately preceding years.

Wheat.—Not one of the crops grown during 1897 have exhibited so pronounced an increase as this cereal, the production attaining very nearly to one-third of the requirements of the colony, and exceeded the output for 1896 by 68 per cent. The prospects of this crop at one time were not good, as it was threatened with rust. The worst expectations in this respect, however, were not realised, for although rust was more in evidence in 1897 than in 1896, its effects did not prove so injurious as was anticipated. Nearly one-half of the total area was blighted, but the average yield of grain therefrom

fell but little short of that obtained from the clean crop.

There were 66,099 acres sown with wheat during 1897, which was 27,157 acres more than in the preceding year. Of this area 5,898 acres were mown for hay, 326 cut for green food for live stock, and 2,087 acres were entirely unproductive. The average yield secured in 1897—namely, 17:47 bushels to each acre reaped for grain—and excluding the unproductive area, has only once been exceeded during the last quinquennium. This was in 1894, when a return of 19 48 bushels was obtained. As the average return in 1896 was 17.34 bushels, the crop has proved a most successful one for two successive seasons. The total yield of wheat grain was 1,009,293 bushels, which was considerably in excess of what was estimated, the crop having threshed out better than was anticipated.

The results obtained from this crop during each of the last five years are given in the following

table:-

				Reaped for Grai	in.		Mown for Hay	•	Cut for	Unproduc-
iring da lipin da lipingdat	Year.	Total Area Sown.	Acres.	Produce.	Average Per Acre.	Acres.	Produce.	Average Per Acre.	Cut for Green Food.	tive.
1893 1894 1895 1896 1897	or in	 31,750 34,387 29,650 38,942 66,099	28,411 27,991 12,950 34,670 57,788	Bushels. 413,094 545,185 123,630 601,254 1,009,293	Bushels. 14·54 19·48 9·55 17·34 17·47	2,417 4,643 1,344 1,845 5,898	Tons. 2,820 6,362 1,428 1,689 7,820	Tons. 1·17 1·37 1·06 0·92 1·33	Acres. 340 747 1,216 1,269 326	Acres 582 1,006 14,140 1,158 2,087

The crop, though generally so satisfactory last year, was to a considerable extent affected with rust, consequently a much larger area than usual was mown for hay, nearly 6,000 acres being thus dealt with; also the acreage that was totally unproductive was nearly twice as great as the like area in 1896.

The average yield obtained was very satisfactory when compared with the results secured in some of the other colonies. The return per acre of wheat grain from each of them, according to the most recent information available, was:—Queensland (1897), 17.47 bushels; New South Wales (1897), 10.63 bushels; Victoria (1896), 4.49 bushels; South Australia (1897), 2.64 bushels; Western Australia (1896), 7.75 bushels; Tasmania (1896), 17.34 bushels; New Zealand (1896), 22.92 bushels. Thus the return obtained in Queensland was only exceeded by one colony—namely, New Zealand. There is no doubt that the climate of that province is better suited to the growth of this general than the more fearild one of that the climate of that province is better suited to the growth of this cereal than the more torrid one of this colony. It is difficult to realise how the South Australian farmer has existed for so long on the very poor results obtained, and yet the yield for 1897 of 2.64 bushels was not an exceptional one, as it exceeded the return for the preceding year by nearly a bushel per acre.

In the Appendix to this Report at Table No. XIII. will be found full details respecting wheat culture in each district of the colony where the cereal is grown.

The cultivation of this grain was extended over a wider area than ever before. There were 55 districts in which land was sown with wheat last year, against 45 districts in 1896. The areas planted in the new districts were, however, very small.

The area devoted to wheat may at present be considered as practically confined to that portion of the Southern division of the colony which lies to the west of the Great Dividing Range, 61,691 acres, or 93 per cent. of the total area sown, being contributed by districts comprised in that portion of the colony.

Of the 4,210 acres planted to the east of the range, 3,681, or 87 per cent., were in West Moreton group of districts, 456 in the Wide Bay and Burnett group, the remaining 73 acres being distributed over the rest of the area. Gatton, Laidley, and Crow's Nest were the most prominent districts in West Moreton, having areas under wheat of 1,715,881, and 539 acres respectively. Unfortunately in Gatton, the district with the largest area, the rust very seriously affected the crop, no less than 1,418 acres being smitten. The result was that the produce of 1,294 acres was converted into hay, all but 26 acres of which

were affected by rust.

The average yields obtained from the areas reaped in the 3 districts in question were: -Gatton, 10.1 bushels per acre; Laidley, 10.7 bushels per acre; and Crow's Nest, 18.9 bushels per acre. Passing to the districts which lie to the west of the Great Dividing Range, the rust was found not to have prevailed to the same extent as was experienced in the coastal districts. Not only was a relatively smaller area attacked, but the effects were also less severe; the average yields from the rusty crops in the Western districts being in excess of that obtained from the like area nearer the coast. Of the 61,691 acres sown in what may be defined as the Downs and Maranoa districts, 1,543 acres were entirely unproductive, sown in what may be defined as the Downs and Maranoa districts, 1,543 acres were entirely unproductive, 117 acres were cut for green food for cattle, and 3,790 were mown for hay, leaving 56,241 acres to attain to their legitimate fruition of "yielding grain." Of the two last-named areas 25,602, or 42.65 per cent., were affected with rust, of which 2,352 acres were mown for hay, and 23,250 acres, or 90.81 per cent., were reaped for grain; whilst of the 34,429 acres unaffected, 1,438 acres were cut for hay, and 32,991 acres, or 95.82 per cent., yielded grain. Thus, rust would appear to have been instrumental in causing a 5 per cent. larger area being converted into hay in this portion of the colony, that being the difference between the proportions devoted to hay in the affected and the unaffected areas respectively.

The wheat areas west of the range may be divided into three groups of districts—namely, the "Downs," the "Maranoa," and the "Warrego." In the first-named are included Southern districts with small areas, which might, perhaps, be challenged as not strictly belonging to the Downs group, but should stand by themselves. The acreage in each, sown with wheat and reaped for grain, and the yields obtained, were as follow:—

were as follow :-

	Acres Sown.	Acres Reaped.	Grain (Bushels).	Average.
The Downs Group	 54,722	 50,427	 929,148	 18.42
The Maranoa ,,	 6,855	 5,814	 56,047	 9.64
The Warrego	 114		 	 

The small area planted in the Warrego group was all converted into hay. It is deserving of note that there was not a single acre reported as affected by rust in either the Maranoa or the Warrego; whilst, of the Downs group, only two districts were entirely free—namely, Goondiwindi and Texas. In the intervening district of Inglewood only 1 acre was returned as affected.

In the same group are found 50,000 out of the 57,000 acres reaped for grain, the centesimal proportion of the total area being 87, and of the total production 92. Three districts of this group comprise 76.6 per cent. of its total wheat area and 80.6 per cent. of its total wheat production. These yielded returns as follow:-

			Acres Reaped.	Bushels.		Average.
Toowoomba	 and beauty	30	16,843	 296,508		17.6
Warwick	 		12,606	 240,784	0.10000	19.1
Allora	 		12,463	 211,953		17.0
			41,912	749,245		17.9

The average yield obtained from each acre reaped, over the 3 districts, was just short of 18 bushels. The least satisfactory return was in Allora, although the average of 17 bushels per acre returned from that district was itself most satisfactory in view of the averages obtained in most of the other colonies of Australasia, which have already been quoted. In some of the districts, with much smaller areas under wheat, but yet with acreages planted and reaped with that cereal exceeding 1,000 acres, much better results were obtained. Highfields from 3,094 acres gathered an average crop of 20.01 bushels; Killarney from 3,052 acres reaped an average of 22.37 bushels; and Dalby from 1,919 acres a return of

The Maranoa group though, as stated, unaffected by rust, yet failed to give as good results as the more easterly districts just quoted. Of the 5 districts comprised, 2—St. George and Surat—reaped no wheat for grain. With the exception of 16 acres unproductive, and 1 acre cut for green food, the 178 acres planted were all mown for hay; so that the 5,814 acres reaped were provided by the other 3 districts. The returns obtained in each of these were as follow:-

		1	cres Reaped.	Bushels.	Average.
Roma	 		3,654	 38,920	 10.65
Mitchell	 		1,474	 8,763	 5.95
Yeulba	 		686	 8,364	 12.19
			5,814	56,047	9.64

The average return is thus seen to be but little more than half of that of the Downs group, the best result being obtained in the districts located most to the east, thus the average yield in Roma was nearly twice as good as in Mitchell, and that in Yeulba nearly 15 per cent. better than was secured in

During the past two or three years great expectations have been raised as to the extension, on a large scale, of wheat cultivation over the fertile plains which lie to the west of Rockhampton. In the neighbourhood of Emerald and Springsure are to be found vast quantities of land which have been pronounced by experts as eminently fitted for wheat cultivation. In 1897, in the Central division of the colony, there were 194 acres of land planted with wheat, of which 88 were unproductive, 24 were mown for hay, and 2 cut for green food, leaving 80 acres, which were reaped for grain. None of the crop was affected with rust, but, with the exception of a small area grown by means of irrigation at Barcaldine, the results were not satisfactory, although the returns were better than was obtained last year in three of the Australian colonies. The average for 80 acres was just short of 8 bushels; but as 27 of them returned an average of 15 04 bushels, a considerable proportion yielded less. The area yielding 15 04 bushels was that referred to in the district of Barcaldine, and, as stated, the return was due to irrigation, the water being obtained from an artesian bore.

There was practically no wheat cultivation in the Northern division of the colony, only 1 acre being reaped for grain. This was in the district of Herberton, and from it a return of 14 bushels was

obtained.

Wheatgrowers have been fortunate in meeting with two consecutive good seasons, and have every prospect of a favourable one for the coming year, and it is confidently expected that, large as was the accession to the wheat area in 1897, a further and more extended production may be looked for as a result of the operations for 1898. The farmer who grows wheat in Queensland has not yet reached the position of the sugar-planter, who has to look to a foreign market for his produce, as, for a time at least, the home requirements for wheat will not be met by the production. There is every prospect of the price, during the present year at least, maintaining its present level, if indeed it does not rise, as not

only was the production of wheat in Australasia a poor one, but the crops throughout the world for the most part showed a deficiency. The prospect, therefore, affords every encouragement to the local farmer.

There has been much discussion respecting the share of profit realised by each of the producers of breadstuffs and bread respectively. The farmers, the millers, and the bakers each in turn claiming to be hardly used, and asserting that they fail to receive a due share of the price realised. This is a question somewhat difficult to determine, as so many side issues are involved, the incidence of some of which are not capable of exact measurement. It would not be equitable to take the exact cost of production under normal conditions, for such conditions frequently do not prevail; for instance, the farmer has bad seasons, whilst the miller and the baker have bad debts to contend with, although the last-mentioned most probably are a greater source of trouble and loss to the latter than to the former. The price realised for a given number of bushels of wheat, when converted into bread, and the share of this received by farmer, miller, and baker, respectively, according to the best information obtainable as to prices and quantities, may not be without interest.

Forty-four bushels of wheat make, on an average, 1 ton (cental ton) of flour. The price received by the farmer for the past season was about 4s. 3d. to 4s. 6d. per bushel. The average price of flour during the period was about £12 14s. 6d., which, with the bran (about 19 bushels at, say,  $10\frac{1}{2}$ d.), would give a return to the miller of £13 11s. From 1 ton of flour the baker would make 1,380 half-quartern loaves, which at  $3\frac{1}{2}$ d. per loaf would yield £20 2s. 6d. Summarised, these figures read:—

Price received from consumer for 44 bushels of wheat when converted to bread, &c. :-

£ s. d. 20 2 6 1,380 loaves at  $3\frac{1}{2}$ d. ... 19 bushels of bran at, say,  $10\frac{1}{2}$ d., about 0 16 6 20 19 0

It might be claimed that the farmer has a return from a by-product in the form of straw, but the value would not be great, and moreover it is very frequently not utilised.

Of the above amount of £20 19s.—

							Percentage to Total.	£	8.	d.
The f	armer	receives	(44 bt	shels a	t 4s. 3d	d.)	 44.63	 9	7	0
	niller	,,					 20.05	 4	4	0
,, 1	oaker	"					 35.32	 7	8	0
							100:00	20	19	0

The foregoing figures show approximately the amount received by each class of producer, and the ratio their respective proportions show to the total. Whether the outlay and risk of each are in the proportions of 45, 20, and 35 respectively, would require to be determined by those in possession of the

The following statement shows the quantity and value of breadstuffs imported into Queensland during each of the last two years :-

863,469 bushels 360,419 bushels 95,111 Wheat 179,956 ... 32,996 tons 31,700 tons 410,036 Flour 370,419 ... 148,137 lb. 5,085 143,546 lb. 5,279 Biscuits £510,426 £555,460

Thus the total value imported declined by only £45,000 in 1897, as the great advance in value of both wheat and flour in the latter year partially discounted the large difference in the quantitative importation, wheat being valued at 4s. 2d. a bushel and flour at £11 4s. 6d. a ton in 1896, and at 5s. 3d. and £12 18s. 8d. respectively in the following year. The increased production of wheat but little affected the quantity of flour imported, but made a marked difference as to the foreign wheat brought into the colony to be gristed at the local mills.

Reducing the flour to wheat on the basis of 44 bushels per ton, and ignoring the biscuits, it is seen that the equivalent of 2,315,293 bushels were imported in 1896, and of 1,755,219 bushels in 1897. Adding the quantities produced in these years, the wheat produced and imported amounted to 2,916,547 bushels in 1896 and 2,764,512 bushels in 1897, of which the home produce contributed 21 per cent. and 37 per

cent. each year respectively.

OATS.—Although there is a considerable demand for this cereal, little or no advance is made with its production, notwithstanding which the acreage planted fluctuates greatly from year to year. The area sown in both 1896 and 1897 certainly showed a large increase on the figures for several preceding years, yet it was but little in excess of the acreage for 1879, just eighteen years previous.

The experience with the crop for the past two years is shown in the following table:-

	Bushels 20-49	Year.		Area for Gra	ain.	Produce.	Average Produce per Acre
1896 1897	10 o :::	:::	 	 Acres. 1,881 1,834		Bushels. 32,181 31,496	Bushels. 17·10 17·17
	Increase in 1 Decrease in 1		 airii to	 47	1002 (2GG)	 10 18911 b 685 1 911	0.07

The acreage and the production are thus seen to have both been a little less in the more recent year, although the crop returned a better average yield in 1897. The production area of this grain follows nearly the same line as that of wheat cultivation.

Upwards of 95 per cent. of the total area planted with oats for grain was situated in one or other of the districts in the Southern division which lie west of the range.

There were 86,727 bushels of oats imported last year, valued at £12,136, and, as there were practically none exported, this makes a consumption of 119,223 bushels, of which 31,496 bushels, or 26 per cent., were the produce of the colony. In addition to this there was oatmeal and hulled oats to the value of £15,172 introduced. These articles carry an import duty of—oats, 8d. per bushel; oatmeal, 4s. per cent.; and hulled oats, 25 per cent. ad valorem.

BARLEY.—As this grain is but little used as a breadstuff, its chief value is for malting. There was more barley grown last year than in any previous year, although in 1879 the production approximated somewhat closely.

The acreage under barley, the production, and the average yield for each of the last two years are shown in the following table:-

M.

	i albinu -	Year.	laludjati Lau vy		Area for Grain.	Produce.	Average Produce per Acre.
1896 1897		00.00	(EE.11) (EE.004) (EE.004)		Acres. 1,122 2,077	Bushels. 19,340 49,840	Bushels. 17·24 24·00
	Increase in 1 Decrease in				955	30,500	6.76

From this it will be seen that last year, compared with 1896, the acreage very nearly, and the produce considerably more than doubled—the average yield having been 24 00 bushels to the acre last

year against 17.24 bushels in 1896.

Malt has been used in increasing quantities, as beer of colonial manufacture has come into more general consumption; but, although the quantity of malt made in the colony has advanced year by year, the output has borne but a very small proportion to the total consumption. There have been no satisfactory explanations offered for this. Good malting barley can be grown in the colony, but maltsters assert that much grain unfitted for this purpose is offered by the farmer; these, on the other hand, complain that, when they have grown barley, as the malthouse is the only market, they find themselves formed to sall at an appropriate the charge of competition the purposers heavy in forced to sell at an unremunerative figure, owing to the absence of competition, the purchasers being so limited in number.

The quantity of malt made and imported respectively during each of past six years was as follows:

			(Fir	l in Queensland, nancial Year,) Bushels.				Imported, Bushels.
1892				737				116,377
1893	a kalendari ka	000.000	0.00	2,198	di Addi	8.77	Tot	121,607
1894	ORR GROLD			1,408	ly bile	m bone	bus.	127,188
1895	utt bun			4,537	Woo'd'	acwiele.		153,843
1896	•••			12,988	00	719901		147,474
1897				14,400		•••		156,613

Whilst during the financial year 1897-8 there were 34,589 bushels of malt produced.

In 1898 the home-produced article formed only some 20 per cent. of the total demand, in the face of an import duty of 4s. 6d. per bushel. No barley specially returned as malting was imported in 1896, therefore it may reasonably be assumed that the 14,400 bushels of malt made in 1896-7 was manufactured out of Queensland grain. This has not been the case in every year, so that even the very modest contribution of home-made malt in other years does not all represent home-grown grain.

MAIZE.—This grain is more extensively cultivated than any other crop. There were 109,721 acres sown with maize last year, exclusive of the area planted and cut in the form of green food for live stock. As the total area under crop was 371,857 acres, maize occupied 30 per cent. of the total area. There were 2,803,172 bushels produced last year, which was less than in 1896, when not only were there nearly 6,000 more acres under this cereal, but the yield was also an exceptionally good one. Last year the return of 25.55 bushels to each acre was above the average.

A comparison of this crop for each of the last two seasons is afforded by the following table:-

N.

	Year			Grai	n.	Average Produce per Acre
1896 1897	y Alexand means	annex!	 	Acres. 115,715 109,721	Bushels. 3,065,333 2,803,172	Bushels. 26:49 25:55
	Increase in 1897 Decrease in 1897	20 2	 	5,994	262,161	0.94

Although so large a producer of maize, yet the exports of this grain are, comparatively speaking, inconsiderable. As it is not employed as a breadstuff, it is surprising how a use is found for so great a quantity. Of imports of the raw grain there are, of course, practically none, but considerable quantities of its various products in the form of different varieties of cornflour, &c., reach the colony. There should here be ample scope for a new industry, and a factory for the purpose is now being established in the Caboolture district.

Naturally the cultivation area of this crop is a more extended one than that of any other agricultural product. It was cultivated last year to a greater or less extent in no less than 79 districts. In 25 of these the area planted exceeded 1,000 acres, and particulars respecting the crop for the past two years in each of them will be found detailed in the following table:—

0

				Area I	planted for	Grain.	Y	ield of Grain		Averag	ge Yield per	r Acre.
Petty Ses	sions Di	strict.		In 1896.	In 1897.	Increase * or Decrease †	In 1896.	In 1897.	Increase * or Decrease †	In 1896.	In 1897.	Increase or Decrease
a sergore				Acres.	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Laidley				10,702	9,403	+1,299	254,804	199,010	+55,794	23.81	21.16	+ 2.65
Warwick				10,206	9,255	+ 951	263,354	274,583	*11,229	25.80	29.67	* 3.87
Foowoomba				10,403	8,855	+1,548	260,613	167,031	+93,582	25.05	18.86	+ 6.19
Allora				9,910	8,124	+1,786	253,326	182,075	+71,251	25.56	22.41	+ 3.15
Gatton				8,814	7,774	+1,040	213,116	149,471	+63,645	24.18	19.23	+ 4.95
Dugandan				7,300	7,700	* 400	203,538	221,785	*18,247	27.88	28.80	* 0.92
Highfields				5,470	5,427	+ 43	169,261	159,721	+ 9,540	30.94	29.43	+ 1.51
Marburg				5,150	5,414	* 264	112,937	112,322	+ 615	21.93	20.75	+ 1.18
Harrisville				3,915	4,461	* 546	116,229	120,833	* 4.604	29.69	27.09	+ 2.60
Rosewood	0.211			3,894	3,141	+ 753	85,200	72,148	†13,052	21.88	22.97	* 1.09
Killarney				4,663	3,010	+1,653	117,170	98,907	+18,263	25.13	32.86	* 7.73
Redcliffe				2,485	2,631	* 146	72,241	81,228	* 8,987	29.07	30.87	* 1.80
Beaudesert				2,587	2,623	* 36	88,917	86,499	+ 2,418	34.37	32.98	+ 1.39
Crow's Nest				2,427	2,577	* 150	76,304	74,143	+ 2,161	31.44	28.77	+ 2.67
Herberton				2,110	2,375	* 265	85,527	89,662	* 4,135	40 53	37.75	+ 2.78
		V		3,348	2,193	+1,155	79,876	56,965	+22,911	23.86	25.98	* 2.12
ואָר.				2,076	2,168	* 92	49,741	55,760	* 6,019	23.96	25.72	* 1.76
			•••	1,790	1,952	* 162	63,289	72,859	* 9.570	35.36	37.33	* 1.97
Nerang				1,316	1,886	* 570	32,308	48,636	*16,328	24.55	25.79	* 1.24
Bundaberg					1,470	* 137	40,728	51,634	*10,906	30.55	35.13	* 4.58
Ciaro				1,333	1,439	* 229	39,044	33,246	+ 5,798	32.27	23.10	+ 9.17
ympie				1,210		THE RESERVE THE PROPERTY OF THE PARTY OF THE	35,494	37,667	* 2,173	26.61	26.21	* 0.40
_			• • • •	1,334	1,437	* 103		35,998	+ 5,107	24.90	25.23	* 033
Logan				1,651	1,427	+ 224	41,105	45,963	+10.095	49.09	35.49	+ 3.60
Cairns				1,142	1,295	* 153	56,058		* 993	31.87	27.40	+ 4.47
Childers			140	886	1,067	* 181	28,241	29,234	. 995	91.01	27 40	1 331

Comparing the crop for 1897 with the total for 1896, it is seen that in no district last year did the area exceed 10,000 acres, and in none did the additional acreage planted amount to 600 acres. In 6 districts—namely, Laidley, Warwick, Toowoomba, Allora, Gatton, and Dugandan—the area sown exceeded or approximated very closely to 8,000 acres. The aggregate acreage and production in these districts amounted to 51,111 acres and 1,193,955 bushels, which were 47 per cent. and 43 per cent. of the total area and production respectively. An investigation of the columns relating to the average yield at once explains the cause in the relative contribution to area and produce. The highest averages usually obtain in the rich and, for the most part, more recently cultivated scrub lands of the Northern districts; and, although in 1897 the returns from some other districts approach more nearly to these than is frequently the case, yet the best average yield was found in Herberton, where 37.75 bushels to the acre were obtained. The second best return was at Nerang—namely, 37.33 bushels. Of the 6 principal maize districts already referred to, Warwick and Dugandan gave the satisfactory averages of 29.67 and 28.80 bushels respectively; but, on the other hand, only 18.86 and 19.23 bushels were garnered at Toowoomba and Gatton. The other districts, besides Herberton and Nerang, which returned mean yields exceeding 30 bushels over the total acreage planted, were: Cairns, 35.49 bushels; Tiaro, 35.13 bushels; Beaudesert, 32,98 bushels; Killarney, 32.86 bushels; and Redcliffe, 30.87 bushels.

It is much more satisfactory in making comparisons as to the average yields secured in different districts to include periods covering a series of years.

In the following table the mean average return for two consecutive quinquennial periods are compared with last year's crop :-

T.	olice Dis						(d. 2)	A. A.	verage Yield per Ac	ere.
Pe	once Dis	strict.		Petty Sessi	ions Di	strict.		Five Years ended 1890.	Five Years ended 1895.	Year 1897.
Allora			 	Allora				Bushels. 16.00	Bushels. 20.34	22.41
Brisbane			 {	Brisbane Redcliffe South Brisbane			}	22.14	23.58	30.76
Bundaberg			 5	Bundaberg Gin Gin			}	30.59	35.50	27.05
Cairns Douglas	:::		 	Cairns				40.75	34·37 31·09	35·49 20·88
Gatton	-14-6		 5	Gatton				44·23 19·22	21.61	20.29
Gympie	•••		 	Laidley Gympie				29.17	32.55	23.10
Highfields Ipswich			 	Highfields Ipswich				21·92 22·96	28·84 20·10	29·43 25·98
Logan			 {	Beaudesert Logan			3	20.93	27.18	30.25
Marburg			 1	Marburg			3	16.84	21.68	21.56
Maryborough			 	Rosewood Maryborough				26.58	27.50	20.26
Normanby			 {	Dugandan Harrisville			}	19.55	24.05	28.17
Fiaro Foowoomba			 	Tiaro Toowoomba	•••			27·28 19·24	29·33 24·18	35·13 18·86
Warwick		Mark Supp	 5	Killarney Warwick				23.57	31.85	30.45

The inquiry is of course limited to districts in which the area under maize is a substantial one. Owing to the changes in boundaries and the proclamation of new districts, some grouping has had to be adopted. Taking the mean of the two quinquennial periods as a standard, it will be seen that the crop for 1897 was a most favourable one around Brisbane, Logan, Normanby, and Tiaro; a good one at Allora, Highfields, Ipswich, and Warwick, and a fair one at Marburg and Rosewood. A slight decrease was apparent at Cairns and at Gatton, a still further one at Toowoomba, whilst at Bundaberg, Douglas, Gympie, and Maryborough the season was most unsatisfactory. In the Wide Bay district drought was severely felt.

RICE (Paddy).—No progress was made with the cultivation of rice last year. There were only 445 acres sown, yielding 12,990 bushels, or an average of 29 19 bushels per acre. The cultivation of this cereal has never yet been attempted in such a way as to prove profitable with well-paid labour. It was believed that a variety of upland rice could be grown, which, doing away with the necessity for planting on swampy land, would enable the cultivation to be carried out on scientific methods with modern on swampy land, would enable the cultivation to be carried out on scientific methods with modern agricultural implements. Failing the planting of such a variety, these could only be used where the conditions allowed of regular irrigation, so that the land could be made available for ploughing at the proper season.

The results of this crop for the past five years are shown in the following table:-

		Yea	ır.			Acres.	Bushels,	Average Bushels
1893	 		11 SINCE 1	80.7.00	10 a 21	789	32,043	40.61
1894	 					 650	24,866	38.26
1895	 					 716	19,245	26.88
1896	 					 600	20,528	34.21
1897	 					 445	12,990	29.19

It will be seen that the acreage and the production last year were the lowest of any year of the

quinquennium, although the average yield was better than in 1895.

Naturally, as rice is a tropical plant, the most successful experience in connection with its cultivation is obtained in the Northern portion of the colony. The districts in which it was planted last year, together with the results, are given in the following table :-

	District. Position in the Colony.							Area Planted.	Quantity Produced.	Average Yield per Acre.	
Cairns				Northern	Division,	East of Co	oast Range	 	 Acres. 232	Bushels. 7,162	Bushels. 30.87
Cook				,, '	,,	,,	,,	 	 59	1,428	24.20
Douglas				,,	"	,,	,,	 	 109	3,529	32.38
Mackay				,,	,,,	,,	,,	 	 13	89	6.85
Mourilyan				,,	,,	"	,,	 	 1	60	60.00
				,,,	,,		"	 	 4	30	7.50
Herberton				,,,		West of C	oast Range	 	 13	284	21.85
Logan				Southern	Division,	East of M	ain Range	 	 12	401	33.42
Nerang				,,	,,	,,	"	 	 2	7	3.20
				e 2015 di	TOTAL				445	12,990	29-19

Ninety per cent. of the total area was provided by the three districts of Cairns, Douglas, and (The average yield in the latter district was considerably less than in the other two.) From a very small area—1 acre—a yield of 60 bushels was obtained; the next best average was on the Logan, where from 12 acres a mean return of 33 42 bushels was secured. As 7,839,293 lb. of rice, representing a considerably larger quantity of paddy, was imported during 1897, valued at £44,204, and facing a duty of 1d. per lb., it will readily be seen that there is scope for a much larger production of this cereal, if only means could be devised for raising it under conditions favourable to economic working.

RYE.—This grain is hardly to be considered a cereal crop, as it is chiefly sown for hay and green forage, the produce of the small area reaped for grain being principally used for seed, although small

quantities are used as a breadstuff and as feed for poultry.

The acreage reaped for grain, the bushels produced, and the average yield obtained for each of

the past five years, are shown in the following statement:-

Year.			Acres.		Yield, Bushels.	Average per Acre, Bushels.
1893	 	 	496		9,479	 19.11
1894	 82-61	 	283		5,251	 18.55
1895	 2,000	 	202		4,169	 20.64
1896	 50-15	 	345	2010	7,449	 21.59
1897	 •••	 	470		8,329	 17.72

There was a smaller area sown in 1897 than in 1893, although more than in either of the other three years. The average yield obtained was below that of any year in the quinquennium.

ENGLISH POTATOES.—The area planted with this tuber in 1897—8,197 acres—was more than was utilised in the preceding year; but as a somewhat poorer return was obtained, the additional production was trifling, the 18,520 tons bagged only exceeding the crop for 1896 by 69 tons.

The acreage, production, and average yield for each of the past five years were as follow:—

Year.	Acreage.	Production, Tons.	Average Yield. Tons.
1893	8,306	17,165	2:07
1894	10,523	28,185	2.68
1895	9,240	19,027	2.06
1896	7,672	18,451	2.40
1897	8,197	18,520	2.26

Although the average obtained in 1897 was exceeded in 1894 and 1896, it was but little below the

mean of the averages of the five years.

In view of the large quantities of potatoes which are imported into the colony each year, it is most surprising that a larger area is not planted to secure the market for the Queensland farmer. 15,756 tons introduced last year fell but little short of the quantity raised, so that 46 per cent. of the total consumption was provided for by a foreign producer, and £61,102 were lost to the agricultural interest, and this in the face of a protective duty of 15s. per ton.

SWEET POTATOES.—This root is principally utilised as food for live stock, although considerable quantities are in demand on the sugar plantations for rations for the Pacific Islanders employed. It is also used to some extent as a vegetable amongst the white agricultural community, but has not been hitherto much appreciated by urban residents. The English potato, however, having been condemned in all cases of dyspepsia by medical authorities, this may, perhaps, have occasioned a larger use of the sweet potato. The area planted in 1897—3,581 acres—exceeded that for 1896 (when only 3,131 acres were planted) by 450 acres, and as the average yield in the former year was 4.88, against 4.57 tons in the latter, there was an increase in production equal to 22 per cent., the output being 14,322 tons in 1896 and 17,466 tons in the following year.

COTTON.—This plant is practically once again out of cultivation. Until some mechanical means of gathering the crop is discovered, it seems improbable that it will ever assume importance. In 1892, under the impetus given by the establishment of a cotton factory, larger areas were planted, but this has failed to be maintained, and the industry has again sunk into insignificance. There were 48 acres under cotton in 1897, yielding 19,977 lb. of unginned cotton, or an average of 416 lb. per acre.

SUGAR. - Although the cultivation of wheat is rapidly assuming great importance, the production

of sugar is by far the first of the agricultural industries.

The final figures obtained from a compilation of the returns for 1897 show but little change on those for 1896, except with regard to the area under cane, which was 15,548 acres greater in 1897 than in the previous year. The area crushed was, on the other hand, slightly less—namely, by 1,208 acres—and the total production by 2,858 tons, thus showing practically the same average return to each acre. The following table affords the opportunity for a comparison of the sugar crops for the years 1896 and

	S												
Year.	Area under Cane for Sugar.	Area Crushed.	Total Yield.	Average Yield per Acre.									
1896	. 98,641	Acres. 66,640 65,482	Tons. 100,774 97,916	Tons. 1.51 1.50									
Increase in 1897	. 15,548	1,208	2,858										

The area under cane for sugar during 1897 was 98,641 acres; 65,432 acres were crushed, and 98,641 tons of sugar were obtained, the averege yield for each acre being 1.50 tons.

Although the season of 1897 was not a satisfactory one, especially in some districts, yet the average obtained was not conspicuously below the means of a number of years; and one of the most serious of the pests which have affected the sugar-cane in recent years—namely, the grub of the cock-chafer beetle—was not nearly so much in evidence in some districts, a consequence of the united and systematic war that has been waged against it. It is not the productive, but the political-commercial aspect, that is chiefly fraught with such grave elements bearing on the well-being of the Queensland sugar industry. Notwithstanding the employment of great care in the cultivation of the cane, and the introduction of the most approved machinery, and the greatest scientific knowledge and skill in the manufacture of the sugar, the producers find themselves face to face with the fact that the price obtainable for the article they turn out is just about equal to the cost of production; sometimes, under favourable conditions, returning a profit, and sometimes not.

If this result were due to the manufacture of the sugar more cheaply elsewhere, the position, as against the Queensland producer, would be unanswerable; but as the low price is brought about by the fiscal policy of the Governments of some of the countries of Europe, it is not unnatural that the sugar-planters of this colony ask for a policy of protection against the results of the bonus paid on the beet sugars produced and exported from continental Europe, and that a cry for "countervailing duties" has been raised.

It was hoped by many that the Imperial Royal Commission appointed to deal with the subject of the decadence of the sugar industry in the West Indies, would recommend a policy of this nature, but instead its report embodied a suggestion of direct assistance to the West Indian planters, and this has been given effect to. The Home Government have so far declined to adopt a policy of retort, although it has been intimated that the necessity for some action of this nature might ultimately arise. The best hope of relief from the effects of the beet sugar bonus would appear to lie in securing, through diplomatic agency, a modification at least, if not the abandonment, of this policy of protection by the countries concerned. A spirit of strong opposition to the bounties is growing amongst the inhabitants of these countries, and the feeling would appear to be gaining ground that the many are being taxed for the benefit of the few, and in addition the producers are themselves beginning to realise that the very taxes required to raise the funds to provide the bonus are so enormously advancing the price of sugar as to grievously limit the consumption in the country of production. This change of feeling with respect to this policy has been further augmented by the adoption of countervailing duties by the United States, so that even in France, where the advocates for a continuance of protection are strongest, symptoms are not wanting of a weakening in this respect.

An International Conference has recently been held at Brussels to consider the whole question, at which it has been announced that Great Britain would be represented. The conference was indefinitely adjourned, to the great disappointment of those to whom the matter was of vital importance. A sugar conference is also to be held in London, at which Queensland will be represented. In the meantime it behoves the Queensland farmer and manufacturer to unite in producing cane sugar as cheaply as possible.

The Queensland Government, through the Agent-General, have urged upon the Imperial Secretary of State for the Colonies the imposition of countervailing duties in the interests of cane sugar, should the results of the Brussels International Conference be productive of no relief.

Producers of cane sugar appear confident that they could easily maintain their position against beet sugar, if indeed they could not exclude it altogether from the market, but for the special conditions under which it is manufactured and marketed. Great progress has been made in the economic production of beet sugar during the past years, not only in the manufacture, but in the cultivation of the sugar beet; and there is no doubt that the conditions have changed since it was found necessary either to grant protection or to witness the collapse of the beet sugar industry. Great advance has also been made during the same period with respect to cane sugar. Whether the improvement has been greater on the part of the beet or the cane could only be authoritively determined by the production of both upon an equal footing commercially. The opportunity for such a test in these colonies, or for something approaching to it, is about to be afforded, as the production of beet sugar—no longer as an experiment—on a thoroughly commercial basis is now in progress. At Maffra, in Gippsland, in Victoria, a large manufactory has been erected at a cost of from £60,000 to £70,000, and is at work putting through about 300 tons of roots per diem. There are nearly 2,000 acres under crop in the neighbourhood, but owing to late planting and dry weather only about two-thirds of that area are available for this season's diffusing. The average yield of root is expected to be about 20 tons per acre, but as a consequence of the drought only from 12 to 14 tons are being obtained. In New South Wales, at Tenterfield, steps are also being taken to start the systematic and extensive cultivation of the sugar beet, but matters have not attained anything like the progress evidenced in Victoria.

At Table No. XV. in the Appendix will be found full particulars as to the area planted with sugar-cane in the various districts of the colony, and the results secured, showing not only the products obtained from the acreage crushed, but also the different areas, the crop of which was otherwise dealt with. It has been found necessary to group some of the districts, as it has proved impossible to locate the sugar to the district where the cane was grown, owing to the extension of the practice of carrying the primary and secondary products—the cane and the juice—to places outside the district of cultivation, for manipulation into the final product. In addition to the area shown in this table, which relates to the cultivation of cane in connection with the production of sugar only, there were nearly 1,000 acres of land planted with sugar-cane for purposes of green food for live stock, nine-tenths of which was grown in the Southern division. This is included with, and will be treated under, fodder crops. There were also, as will be seen from the above table, 1,783 acres returned as reserved for the purpose of providing sets to plant either new ground or land which had been cut sufficiently long as rattoon and wanted replanting. Taken at 12 tons of cane to the acre, the average obtained from the area crushed last year, this gives 21,396 tons of cane used as sets. Allowing for the 15,000 additional acres planted in 1897 compared with 1896, and assuming that the average of the area crushed during the past two years—say, 66,000 acres—has to be replanted every third year, an area of 37,000 acres to be planted is

arrived at, so that about 0.57, or rather more than half a ton of sets, are apparently required to plant each acre of land. The area set apart for plants compared to the total area for sugar was greater in the Northern division than in the Southern.

Out of the total area of land under cane for sugar—namely, 98,641 acres—31,426, or nearly one-third, was chiefly comprised under the terms "newly planted," or "stand-over cane". There was rather a larger proportion of newly planted and stand-over land in the Northern than in the Southern division—namely, 34 and 29 per cent. of the total areas respectively. Cairns and Port Douglas in the North will probably, during the current season, contribute more largely, as compared with the past year, to the area crushed, than other districts; the proportion of newly planted and stand-over cane in this group being 51 per cent. of the total area.

The weight of cane returned as taken off the 65,432 acres crushed was 804,815 tons, or an average of 12·3 tons off each acre. With respect to the tonnage of cane obtained, great differences are found in the returns of the various districts. In the Northern division the average was 13·8 tons, in the South 10·6 tons, and in the Central 10·3 tons. In the five sugar districts, or group of districts in the first-named division, the returns per acre were:—Ingham and Mourilyan, 20·0 tons; Bowen, 18·8 tons; Ayr, 16·6 tons; Cairns and Douglas, 11·3 tons; and Mackay, 9·9 tons. In the South, in the three chief districts or groups were obtained crops of 13·2 tons, 9·1 tons, and 8·7 tons—namely, Childers, Maryborough, and Tiaro; Logan; and Bundaberg and Gin Gin, respectively.

The return of molasses given in the table, as explained in the footnote, falls much short of the actual production as in a number of instances this by-product is not saved; so that the amount recorded is most probably the quantity put to profit, either for the distillation or for conversion into treacle as an article of diet.

The experience of the past two sugar seasons in the various districts of the colony are compared in the following table:—

T

		Cultivation.				Prod	uction.		
Petty Sessions District.	Area in	Area in	Increase	18	96.	1897.		Increase or — Decrease in 1897.	
STAN PRODUCTIVE CONTRACTOR	1896.	1897.	—Decrease in 1897.	Area Crushed.	Produce.	Area Crushed.	Produce.	Area Crushed.	Produce.
namenta nipona ani kababata	Acres.	Acres.	Acres.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Ayr	6,089	6,510	421	4,515	6,146	4,404	8,236	-111	2,090
Bowen	692	1.102	410			582	1,350	582	1,350
Bundaberg and Gin Gin	20,458	23,305	2,847	19,489	28,141	16,139	16,999	-3,350	-11,14
Cairns	3,124	4,701	1,577	1,857	2,932	2,319	4,077	462	1,14
Childers, Maryborough and Tiaro	13,619	15,253	1,634	10,531	21,000	10,936	13,867	405	-7,13
Ingham	7,180	8,331	1,151	6,005	11,938	6,198	15,529	193	3,59
Logan	1,656	1.585	-71	1,656	2,058	1,007	765	-649	-1,29
Mackay	21,076	27,251	6,175	16,428	16,515	16,794	22,604	366	6,08
Marburg	637	940	303	440	733	610	300	170	-43
Maroochy and Gympie	178	913	735	178	178	544	963	366	78
Mourilyan	5,083	4,495	-588	4.167	8,645	3,527	9,345	-640	700
Nerang	1,220	1,015	-205	651	910	761	812	110	-98
Port Douglas	1,208	2,048	840			911	2,264	911	2,26
Rockhampton	773	1,192	419	690	1,550	700	805	10	-74
Elsewhere	100	1,	-100	33	28			-33	-25
Totals, 1896	83,093			66,640	100,774				
Totals, 1897		98,641				65,432	97,916		
Increase in certain Districts	1007		10 510					0 ===	10014
Decrease in certain Districts			16,512 964					3,575 4,783	18,014 20,872
Net Increase in 1897			15,548						
Net Decrease in 1897								1,208	2,858

Dealing first with the area under cane for sugar, three of the districts returned by name showed a smaller area in 1897 than in 1896. The largest decrease was in Mourilyan, and amounted to 588 acres, or rather more than one-tenth of the total area in the district. The most substantial increase was in Mackay, where 6,175 additional acres were under cane. The other increases exceeding 1,000 acres were:—Bundaberg and Gin Gin, 2,847 acres; Childers, &c., 1,634 acres; Cairns, 1,577 acres; and Ingham, 1,151 acres. Besides these, Port Douglas, with an increase of 840 acres on 1,208 acres, which was the area under cane in 1896, made a greater relative progress than any other district; amounting as it did to 70 per cent. on the figures for the previous year. The area planted would not be so greatly influenced by the dry weather which prevailed as the area crushed and the return obtained. Many of the districts were affected by the drought. At Bundaberg and Childers the effects were very severely felt, whilst the remarks on the returns record much complaint from the same cause in Maryborough, Mackay, and Cairns. The effects of the dry weather would appear to have been less pronounced in Tiaro, Bowen, Townsville, and Douglas. Four districts recorded a reduced acreage put through the mill, aggregating 4,783 acres, of which 3,350 were contributed by Bundaberg and Gin Gin. The district contributing the largest increase to the area crushed was Port Douglas, with 911 acres. The greatest decline in production was found in the Bundaberg-Gin Gin group, where there was 11,142 tons less sugar turned out in 1897 than in 1896. The Childers, Maryborough, Tiaro group followed with a decrease of 7,133 tons. The largest increase in the output of sugar was at Mackay, where production amounted to 22,604 tons in 1897, against 16,515 in 1896, an advance of 6,089 tons. There were also substantial increases at Ingham, Port Douglas, and Ayr.

Considerable differences as to the relation between the area crushed and the sugar produced are to be found when the figures for individual districts are compared with one another. This is illustrated by the following statement, which shows the average return of sugar obtained from each acre crushed in the several more important districts of the colony:—

			A	VERAGE	YIELD, ETC.			
				1893.	1894.	1895.	1896	897
Ayr		100		1.84	2.57	1.61	1.36	1.87
Bundaberg		0.00		1.71	1.50	1.48	1.47	1.05
Gin Gin					000000	0.10	1.18	1 00
Cairns				1.25	1.75	1.89	1.58	1.76
Childers						1.71	2.20)	
Maryborou	gh			2.18	2.09	2.00	1.11 }	1.27
Tiaro							1.39)	
Ingham	1.00	group was		2.26	2.72	1.86	1.99	2.51
Logan		100	100	1.23	1.25	0.96	1.24	0.76
Mackay			1100	1.79	1.79	1.47	1.01	1.35
Mourilyan				1.36	1.49	1.61	2.08	2.65

The best yield was obtained at Mourilyan, where a return of more than  $2\frac{1}{2}$  tons to each acre was secured, whilst the poorest was on the Logan, where the output only averaged  $\frac{3}{4}$  ton, or three-tenths of that at Mourilyan. The results realised at Ingham were but little inferior to those at Mourilyan, and as these two districts together crushed the produce of nearly 10,000 acres, they contributed largely to counteract the indifferent returns obtained elsewhere. There were, however, some complaints received as to the mischief resulting from grubs. This pest, if neglected, is capable of producing much disaster, and it is to be hoped that it will in its early stages be vigorously dealt with.

Dry weather seems to have affected the whole of the districts, with the exception of Mourilyan and Ingham, but more especially in the Southern portion of the colony; the worst effects of the drought being experienced within the Wide Bay area. Cairns and Ayr both gave satisfactory average returns of  $1\frac{3}{4}$  tons per acre and upwards, whilst that for Bundaberg and Gin Gin only just exceeded 1 ton; Mackay and the Maryborough group returning somewhat better yields of  $1\frac{1}{3}$  and  $1\frac{1}{4}$  tons respectively.

A great impetus has been given to the sugar industry by the passing of "The Sugar Works Guarantee Acts, 1893 to 1895." These comprise two statutes. The amendment passed in 1895 is of an interpretative and limitative nature chiefly, although also dealing to some extent with administration and matters of account. The original measure passed in 1893 (57 Vic. No. 18) provides that the Government may, on the application of an incorporated company, guarantee its debentures with interest at  $3\frac{1}{2}$  per cent., the proceeds to be devoted to the erection of works for the extraction of sugar, taking as a protection against loss, a mortgage over the works and over freehold land in the vicinity. This measure has been largely availed of, and has opened to the sugar industry important areas of land that would have remained for a long time unutilised for sugar cultivation, had the means for manufacturing been dependent on unaided private enterprise.

A sum of £360,000 has been advanced to twelve different companies for the purposes of the Act, mortgages being held by the Crown over the different works as well as over 108,895 acres of freehold land to be cultivated in connection therewith.

The establishment of most of these factories has taken place during a period not particularly favourable to sugar production, so that the results, although perhaps short of what was by many anticipated, may for the most part be regarded with much hope. The present season (1898) promises to be a very fine one for the sugar-planter, and may be expected to establish most of these industries on a sound financial basis.

The output for the present year has been estimated at from 150,000 to 160,000 tons. In view of the amount of land under cane at the end of 1897, the average yield will require to be an exceptional one, and the area allowed to stand over to the following season much below that of the past few years if these anticipations are to be realised; but the information to hand from nearly every district points to a most favourable campaign.

The Colonial Sugar Company are, moreover, only offering to take the sugars of certain mills in the area comprised by Bundaberg, Isis, and Maryborough on somewhat stringent conditions. They have issued a circular to manufacturers of raw sugars, stating that they are prepared to pay £8 5s. per ton with bonus on the same conditions as in 1897, on the condition that makers of whites and yellows will only place 35,000 tons upon the markets of Australasia, exporting the residue of their stocks to foreign markets. The manufacturers demur to this demand, but would be willing to combine to export pro ratâ to foreign markets the excess of production over Australasian requirements. Canada has also just passed a tariff affording preferential duties in favour of sugars the produce of the British Dominion.

The imports and exports of sugar during last year amounted to 47 tons and 62,418 tons respectively. The net export deducted from the production would give a consumption of 35,545 tons, or 166 lb. per capita of the mean population, taken upon the figures of the individual year. This shows how misleading it would be to estimate consumption on such a basis, as figures of previous years have shown a demand of from 20,000 to 25,000 tons only for local requirements.

The breweries and jam factories consume an increasing quantity of this commodity, the latter alone requiring not less than 2,000 tons at the lowest estimate.

Arrowroot.—A large proportion of the root of the plant from which Queensland arrowroot is prepared (Canna edulis) is grown for pig feed. There has been for many years an increasing quantity thus utilised, and it was considered that it was no longer advisable to continue the practice hitherto adopted of converting, for the purposes of the returns, the root so used into the terms of the arrowroot of commerce. At the same time it was practically impossible to separate the areas, the produce of which

was thus put to different uses. For 1897 and in future years, therefore, the yield will be given in tons of root, and the quantity of arrowroot made from a portion of such root be collected as forming a separate industry.

For convenience of comparison, the produce of this crop for 1895 and 1896 has also been converted on an approved basis back into tons of root, and particulars respecting the arrowroot crop for the past three years are given in the following statement:—

160		.0			Produce,	Average Yield,
Year.	1.86		Acres.		Tons of Tuber.	Tons.
1895	1 4.7.)	 84:1.	194	71	1,289	 6.65
1896	7.8.14	 01:0	309		2,603	 8:42
1897	1-178.	 08:1.	391	ac.t.	2,888	 7.39

The actual quantity of the arrowroot of commerce turned out at the various arrowroot mills of the colony is, for the reasons above given, only available for 1897, when it amounted to 367,330 lb.

Tobacco.—A marked decline in the cultivation of tobacco has been manifested during the past two years. This is a matter for regret, as large areas of the colony are well suited to the growth of the plant. A large and increasing market exists for the product within the colony, and where its cultivation and the drying of the leaf are well understood and properly carried out, the crop is a most profitable one. There were 1,061 acres under tobacco in 1895, 994 acres in 1896, and 755 acres in 1897. The importance of the industry has been so fully recognised by the Government that the services of a qualified tobacco expert have been secured from America by the Department of Agriculture to instruct planters as to the methods of cultivation and curing. From 7 cwt. to 8 cwt. of cured leaf per acre would appear to be the average crop in Queensland, taken over the whole area, although on three occasions during the past ten years upwards of 10 cwt. have been secured—namely, in 1888, 11.53 cwt.; in 1892, 11.97 cwt.; and in 1894, 10.46 cwt. The return from each acre last year was 7.55 cwt. The aggregate output for each of the four years was:—1894, 9,571 cwt.; 1895, 7,511 cwt.; 1896, 8,629 cwt.; and 1897, 5,703 cwt. Thus the production has declined 3,868 cwt. as compared with the crop for 1894.

The cultivation of this crop is practically confined to the western portion of the Southern division, in the districts of Texas, Inglewood, and Stanthorpe. These three districts comprised 748 acres, or 99 per cent. of the total area planted, and the results obtained with respect to the crops in each of these districts were as follow:—

to aniesod			Acreage.		Production, Cwt.		Average,
Texas	odT.	ao triân	581	inque.	4,153	308	7.15
Inglewood	er enel	morb. on	153		1,334		8.72
Stanthorpe			14	OT HE SO	196		14.00
			20 TOTAL		MIS <u>-10 A</u> 0178	•••	
			748		5,683		

The small area in the Stanthorpe district gave such an excellent return that it should certainly be the means of inducing a more extensive cultivation of this crop in that district.

Through inexperience many mistakes have been made by the planter, both as to cultivation and also as to the subsequent treatment of the leaf, and some of the growers have ceased to cultivate, but, encouraged by the advice of the Government expert, propose to again undertake the cultivation of tobacco. The quantity of all kinds which was imported last year was 760,156 lb., valued at £76,902.

Coffee.—It is evident from the increasing attention given to the cultivation of this plant, that the production of the coffee bean is to take a prominent place amongst the industries of the colony. The great increase in the consumption throughout the world of this stimulant and tonic, decocted from the berry seeds of this tree, affords the assurance to the coffee-planter not only of a continuing but of an expanding market for his produce. The alkaloid that gives its peculiar properties to the stone or seed of the coffee berry is identical with that contained in the foliage of the tea shrub. It is found to possess the power of stimulating the brain and of acting as a stomachic tonic, thus allaying the effects of hunger and fatigue, and promoting digestion. Its consumption has increased by upwards of eight times within fifty years, chiefly amongst the inhabitants of continental Europe; whilst amongst citizens of the British Empire it is comparatively but little used. According to Mulhall, the following are the rates of per capita consumption:—Holland, 322 oz.; Belgium, 158 oz.; United States, 140 oz.; Switzerland, 114 oz.; Scandinavia, 110 oz.; United Kingdom, 14 oz. In Queensland, the consumption would appear to be less than one-half of that of the United Kingdom. South America, Java, and the West Indies are the chief countries of production, contributing about three-fourths of the total output.

The climate of nearly all the coastal districts of the colony is well adapted to the growth of the coffeetree. Any area possessing rich soil of good depth, and well drained, with an easterly aspect, provided the degree of cold is never below the freezing point, would prove suitable. As there are plenty of localities from Brisbane northwards which would comply with these conditions, and as the returns obtained from an established coffee plantation are in excess, acre for acre, of many of the other objects of the farming industry, it is not surprising to find year by year a larger area planted.

There were 311 acres planted with coffee up to the end of 1897, of which 180 acres were productive, whilst in 1896 there was a total area of 138 acres only, an increase in the former year of 173 acres, or 125 per cent. From these figures it is evident that a considerable area in 1896 planted with coffee, but unproductive, was not definitely returned, being probably included under the heading garden and orchard, as the coffee plant does not bear for three years, and is not in its prime under six or seven years, whilst trees upwards of forty years old have been known to bear freely. This apparently occurred with respect to the districts of Cook, Mackay, and Maroochy.

All the land planted was to the east of the Great Dividing Range, 29 acres in the Southern division, 7 acres in the Central, and 275 acres in the Northern.

The gross yield obtained was 81,614 lb. of parchment in 1897, and 9,707 lb. in 1896, or an average of 453 lb. per acre off the productive area of 180½ acres, against 373 lb. per acre in 1896.

The following statement furnishes information respecting last year's coffee crop in each Petty Sessions District where it was planted:—

 TICO MICTO IC MICES	Pittitea.							
District.	Non-produ	ctive.	roductive.	· s Foliated	Yield.		e Yield per coductive A	
					Lb.	netherad	Lb.	
Maroochy	83		141	1	3,140	ilo pr	220	
Maryborough	$\frac{3}{4}$	South Aud ten	$5\frac{1}{4}$		827	da uso	158	
St. Lawrence			1		336		336	
Rockhampton	3	0124.101	3		500		167	
Cairns	51		89		16,962		191	
Cardwell		Sed.	6 1		. 112	Toonwoom	112	
Cook	1	088	453		57,065	dolars W	1,247	
Douglas	13	150.001	e			anne.		
Mackay	54		20		2,000	•••	100	
Mourilyan			1		672	•••	672	
		11.00,			9.071.0-7			
Total	1303	Ton survey ou	180 <del>1</del>	ed wo	81,614	1000	453	
7.00007 191	4.4 7004							

It will be seen that in a few of the districts where coffee-growing has been carried on for some time that large yields were obtained. In Cook a return of upwards of half a ton to each acre was garnered, whilst in Mourilyan an average yield of 672 lb. was secured.

As the coffee plant, although producing some fruit after the second or third year, is not in full bearing at that age, the general average of the colony is much reduced by areas which, although not entirely unproductive, are yet only just coming to maturity.

VINES.—Although there was a larger area under vines and a larger area bearing in 1897 than in 1896, yet, as the average return was a poorer one in the former than in the latter year, there were fewer grapes gathered last year than in 1896.

The results of the grape crop for each of the last two years are given in the following table:-

170,487	790	Vineyards.			\$681
797 Year. 202282 -	Acres Bearing.	Acres not Bearing.	Total.	Grapes Gathered.	Average Yield.
1896	1,842	178	2,020	ь. 5,122,531	Lb. 2,781
1897	1,881	286	2,167	4,822,991	2,564

The vineyards were increased by 147 acres last year, but as 286 out of the 2,167 acres under vines were unproductive, the area bearing was only 39 acres more than in 1896. The average return obtained was rather more than 1 ton of grapes to each acre. The mean results from each acre bearing for the last three years, the period for which the yield of this crop has been collected in pounds of grapes only, were: 1895, 2,388 lb.; 1896, 2,781 lbs.; and 1897, 2,564 lb.

The following table gives for 1896 and 1897 detailed information respecting viticulture in each of the principal vine districts of the colony:—

V

				rom sta			A A	rea under	Vines.	di rol pa	dt lo asson	uelt in ex
Petty	Sess	ions Dist	rict.	104 11 <b>W</b> 0	1896.	eda ed.	al moties	1897.		Increase+	Grapes Gathered.	1897.
				Bearing.	Not yet Bearing.	Total Area.	Bearing.	Not yet. Bearing	Total Area.	Decrease—in 1897.		Grapes Gathered.
	70	1 .		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Lb.	Lb,
Roma				 427	14	441	490	112	602	+ 161	1,411,560	1,058,408
Brisbane				 154	4	158	134	6	140	- 18	332,433	334,713
Toowoomba				 151	6	157	159	14	173	+ 16	836,823	826,391
Warwick				 135	2	137	141	4	145	+ 8	494,165	402,331
South Brisban	e			 126	8	134	124	3	127	- 7	201,735	260,709
Logan				 63	1	64	51	5	56	- 8	137,404	125,980
Gatton				 57	3	60	60	18	78	+ 18	143,340	187,482
Maryborough				 52	3	55	45	8	53	- 2	121,948	72,957
Ipswich				 48	2	50	36	1	37	- 13	58,590	34,369
Highfields				 43	1	44	42	1	43	- 1	218,520	156,718
Marburg			100	 40	2	42	49	3	52	+ 10	126,870	149,260
Laidley				 39	11	50	24	3	27	- 23	88,004	52,680
Allora				39	Î	40	45	1	46	+ 6	98,733	153,128
Rockhampton			2.81	 34	19	53	44	16	60	+ 7	64,530	47,202
Nerang				 30	3	33	23		23	- 10	45,339	38,680
Sympie				 24	5	29	35	3	38	+ 9	32,892	43,440
Cleveland				 25	1	26	16	3	19	- 7	37,966	46,038
Mitchell				 21	3	24	23	1	24	00000000	42,390	49,060

By far the greatest increase in area was at Roma; indeed, the additional acreage under the grape vine in that district exceeded the increase for the whole colony. Naturally, a large proportion of this area was as yet not bearing. Of other districts in which the area exceeded 100 acres, Toowoomba and Warwick showed a further acreage of 16 and 8 acres respectively, whilst Brisbane and South Brisbane both recorded a falling off.

The average returns obtained on the area bearing in the more important districts were:—

	1896.	1897.
	Average per Acre, Lb.	Average per Acre, Lb.
Toowoomba	 5,542	5,197
Warwick	 3,660	2,853
Brisbane	 2,159	2,498
Roma	 3,306	2,160
South Brisbane	1.601	2,102

From this it is evident that Toowoomba is facile princeps with respect to the yield. The poor yield obtained in Roma, particularly in 1897, although no doubt due largely to drought, was also contributed to by the relatively large area not very long planted, the vines on which, although bearing, were yet by no means sufficiently matured to return the full crop.

There was more wine and brandy made as the produce of a portion of the grapes grown in 1897 than there was in 1896, although last year the production was still short of that for 1895.

The following statement shows the number of winemakers and the quantity of wine and brandy made during each of the past five years:—

			Year	r.			Number of Makers.	Wine Made.	Brandy Made.
	oldus	gaiw.	ffel s	fit of	Zavie.		results and applicate to	Gallons.	Gallons.
1893						 	466	101,528	664
1894						 	567	176,497	917
1895	7 7		ter milie			 	661	238,208	1,259
1896						 	704	170,733	767
1897						 	723	207,945	994

The number of persons engaged in the manufacture of wine was greater in 1897 than in any other year of the quinquennium, and, except in 1895, an especially favourable year, the aggregate quantity of both wine and brandy obtained was greater.

The districts in which wine was made in larger quantities than 10,000 gallons were as follow:—Warwick, 44,252 gallons; Toowoomba, 37,467 gallons; Roma, 20,090 gallons; Brisbane, 17,108 gallons; South Brisbane, 13,023 gallons; and Rosewood, 11,446 gallons.

A peculiarity in connection with Toowoomba is the large number of makers. There were 198 proprietors who contributed to the wine production of this district, whilst the larger quantity in Warwick was the output of 19 vignerons only. There were 44 districts in which wine was manufactured; in only 6 of these was any brandy produced.

HAY.—The mean return per acre of all hay crops was rather above the average, falling only a little short of 2 tons to each acre. The area devoted to this purpose in 1897—namely, 48,220 acres—was much in excess of that for the previous year, when 35,764 only were mown. The output of hay for last year was 94,339 tons, or an average of 1.96 tons per acre.

The following table furnishes information as to the area mown and the return obtained from each kind of hay crop for the past two years:—

N.	n./	
·v	v	٠

	suit, efd	Mown for Hay.					1896.		1897
817, ABD 8 1820,023 8	E84, 2003 822, 368	down for	Нау.			Acres.	Average Yield per Acre.	Acres.	Average Yield per Acre.
286.200 g				OAT			Tons.		Tons.
Wheat					 	1,845	0.92	5,898	1.33
Oats					 	11,565	1.54	14,002	1.77
Barley					 	282	1.78	291	1.88
Rye					 	427	1.68	702	1.98
Lucerne					 	17,892	2.34	23,362	2.26
Panicum					 	3,673	1.91	3,791	1.78
Other Grasse	s				 	80	1:70	174	1.64
	TOTAL				[	35,764	1.95	48,220	1.96

Lucerne provides nearly one-half of the total area, and oats rather more than one-fourth. The increase in area in 1897 was—in lucerne, 5,470 acres; wheat, 4,053 acres; and oats, 2,437 acres. Wheat, oats, barley, and rye, all gave a larger average yield in 1897; whilst lucerne, panicum, and other grasses gave a poorer return.

Green Forage.—In 1897 there was a slightly larger area reserved for the supply of green fodder for cattle than in 1896, either as used fresh or in the form of ensilage. In this, again, lucerne stands first as a contributor, with 6,218 acres; whilst of sorghum, maize, oats, and barley, important acreages were devoted to this purpose. The number of acres of each kind of forage crop was as follows :-

Wheat	 	 	Acres. 326	Sugar-cane	 	 973
Oats	 	 	2,298	Sorghum, &c.	 	 3,635
Barley	 	 	1,591	Lucerne	 	 6,218
Maize	 		2,505	Panicum	 	 350
Rye	 	 	344	Other grasses	 	 663

Total, 19,903 acres.

With more knowledge and experience as to the great benefits which result from the storage of fodder in silos, this practice is likely to be extended, when increasing areas may be expected to be annually returned as cropped with the various suitable forage plants.

Bananas.—The question of the existence of various diseases and pests in fruit, and other vegetable products has for some time been recognised as an important one, and in 1836 a measure was passed dealing with the matter. "The Diseases in Plants Act of 1896" provides for the prohibition of the import or removal of any plants or things likely to introduce any insect fungi or diseases. Inspectors are authorised to enter for the purpose of searching or examining for the same, and to order the owner to

eradicate any disease, &c., and, failing this, have the same eradicated.

Little has up to the present been done to put this statute in force, except with respect to importations, although there is no doubt that in Queensland, in common with all countries where restrictive measures are not adopted at the site of production, many agricultural products, particularly fruits, are less free from diseases and pests of various kinds than is at all desirable; a few badly conducted orchards in a district going far to nullify the efforts put forth on better managed holdings. The subject has now, however, assumed prominence, owing to the action of the departments administering synonymous Acts in New South Wales and Victoria. During the past few months wholesale condemnations of Queensland fruits, particularly of bananas, have been made at both Sydney and Melbourne, although the action has been much more sweeping at the former port. That these colonies were right and wise in forbidding the introduction of any product that is either unfit for use or would be calculated to introduce a new disease or pest into the country must be conceded, but, as the pests complained of—the fruit fly and scale—are already firmly established in both the colonies in question, and as admittedly only portions of the cargo were affected, the utter condemnation of the whole has been taken exception to as unnecessarily drastic, and if continued would be calculated to have a marked effect on the fruit production in Queensland, and must result in greatly enhancing prices in the southern markets.

Owners might again consider whether it may not be possible to utilise their product by conversion into flour, as many medical men are agreed as to its good qualities as an article of diet; but the peculiar colour of the meal would appear to be the chief objection to its adoption. This difficulty might perhaps

be removed, or the prejudice against its use on this account overcome.

There were 4,828 acres under bananas in 1897, an increase of 351 acres over 1896, and was the largest area ever returned under this crop. The production, however, fell short of that for the previous year, the figures being—17,059,124 dozen in 1896, and 16,494,604 dozen in 1897.

Particulars of the crop for the past two years in districts in which the area planted exceeded 50

acres were as follow:-

Pett	y Sessions	District		A	rea.	Produ	action.	Increase + or Decrease - 1897.		
. Tilet ur — en reine				1896.	1897.	1896.	1897.	Area.	Quantity.	
Brisbane	401A		1064	 Acres.	Acres.	Dozen. 170,740	Dozen. 179,628	Acres. + 10	Dozen. + 8,888	
Cairns				 1,778	1,709	8,172,900	7,928,662	- 69	- 244,238	
Cleveland	¥3			 336	315	505,884	476,316	- 21	- 29,568	
Cook				 55	64	75,370	74,900	+ 9	- 470	
Douglas				 32	54	52,546	41,985	+ 22	- 10,561	
Logan				 293	446	390,613	1,621,050	+ 153	+ 1,230,437	
Maroochy				 264	442	359,318	648,841	+ 178	+ 289,523	
Maryborough	9			 114	125	104,159	86,253	+ 11	- 17,906	
Mourilyan				 1,113	1,186	6,745,980	5,165,810	+ 73	-1,580,170	
Somerset				 110	109	14,304	12,794	- 1	- 1,510	

Sixty per cent. of the area and 79 per cent. of the production were contributed by two districts-Cairns and Mourilyan. Additional areas exceeding 100 acres were planted in Maroochy and Logan. The largest decrease was in Cairns, where there were 69 acres less under bananas in 1897 than

PINEAPPLES.—There was a larger area under pineapples in 1897 than in any year since 1892. The results obtained from the 909 acres planted, although yielding a better return than in 1896, fell a long way short of the average of the previous five years. There were 351,524 dozen pineapples gathered, which exceeded the number for the preceding year by 37,689.

The results of this crop for the past two years, with respect to the districts where pineapples are chiefly grown, are shown in the following table:—

District.	18	896.	18	97.	Increase+ or —Decrease.		
3.635	5.9	dunosti 20	0.0-			1	
6,218	Acres.	Dozen.	Acres.	Dozen.	Acres.	Dozen.	
Brisbane	435	194,310	465	196,413	+ 30	+ 2,103	
Cairns	67	13,670	68	17,596	+ 1	+ 3,926	
Charters Towers	16	5,195	27	6,740	+ 11	+ 1,545	
Cleveland	26	3,562	57	56,213	+ 31	+ 52,651	
Cook 2001 001 001 001	34	4,210	18	3,680	- 16	- 530	
Croydon	8	2,827	6	962	- 2	- 1,865	
Douglas	20	6,726	23	2,840	+ 3	- 3,886	
Logan	43	21,185	54	12,843	+ 11	- 8,342	
Maryborough	18	7,320	18	4,113	SAS PAC	- 3,207	
Maroochy	18	3,385	23	2,676	+ 5	- 709	
Mourilyan	10	2,750	18	5,060	+ 8	+ 2,310	
Rockhampton	15	3,477	18	4,508	+ 3	+ 1,031	

Croydon has been included in the table for the reason that, although the area is small, the district represents a locality outside the ordinary limits of agriculture. In 1897 the return obtained was not satisfactory, but in the previous year the average yield exceeded that of several other districts, which, from a climatic standpoint, might be considered more advantageously located. Brisbane comprises more than half—51 per cent.—of the total area under pineapples. The acreage for 1897 included an addition of 30 acres over the area for 1896. This was exceeded in one district—Cleveland—where 31 acres of newly planted land were returned. The average yield in Brisbane was 422 dozen per acre, which was a considerable improvement on the mean of 387 dozen secured over the whole colony. The best return was obtained at Cleveland, where 56,213 dozen of the fruit were gathered off 57 acres, or an average yield per acre of 986 dozen; one plantation of 15 acres returning a mean yield of 3,333 dozen. A small export trade in this fruit, in a preserved state, would appear to be developing.

Oranges.—A marked increase in the acreage devoted to the cultivation of the orange has been apparent during the past ten years, having advanced from 992 acres in 1887 to 2,196 last year. The export trade in oranges has for some years been a growing one, and unless some modification of the recently instituted practice of wholesale condemnation at southern ports takes place, the opportunities for securing a market there will be seriously curtailed, although the outlook for the export of citrus fruits to Europe is more promising; but fruit for this purpose requires to be carefully graded, of the best quality, and free from even the suspicion of disease.

The production last year of 1,628,176 dozen, although larger than in 1896, fell short of that for the preceding four years, and the average return was the poorest obtained since 1890. There were 152 orangeries, of a greater or less extent, contributing to the production of this fruit during 1897. As the orange tree does not bear for the first few years of its life, the lower averages of the past two years are no doubt due in part to the inclusion of young orangeries into the area. During 1897 this fruit returned an average of 741 dozen per acre.

A comparison of the crop for the past two years in some of the more important districts is afforded by the following table:—

Z

			1807	Area	. 1887.	Produc	etion.	Increase + or D	ecrease — in 1897
	Sessions							_	1
			Dozen.	1896.	1897.	1896.	1897.	Area.	Production.
8,888	10	4-	179,628	047,031				-	SIGNGERIO
			,928,662	Acres.	Acres.	Dozen.	Dozen.	Acres.	Dozen.
Bowen	18		476,316	99	121	78,798	93,384	+ 22	+ 14,586
Brisbane				76	78	66,466	70,867	+ 2	+ 4,401
Bundaberg			000***	48	45	37,950	37,370	- 3	- 580
Caboolture				24	46	7,904	9,357	+ 22	+ 1,453
Cairns				81	127	107,430	225,960	+ 46	+118,530
Cardwell			030,133,	59	70	72,300	52,400	+ 11	+ 19,900
Charters Towe	100			23	37	8,708	28,900	+ 14	+ 20,192
Cleveland			118,841	78	100	54,720	75,544	- 22	+ 20,824
Cook				49	55	35,085	30,324	+ 6	- 4,761
Douglas			11002,00	83	89	50,090	58,257	+ 6	+ 8,167
atton				120	129	33,303	95,380	+ 9	+62,077
Tympie				34	45	14,714	13,130	+ 1	- 1,584
Herberton			12,794	23	16	19,270	23,950	- 7	+ 4,680
Logan				42	64	16,040	32,800	+ 22	+ 16,760
Maroochy				76	234	30,057	58,958	+158	+ 28,901
Maryborough	with with	lio ta	derigos and	222	209	186,999	157,793	- 13	- 29,206
Nerang				104	145	62,350	97,248	+ 41	+ 34,898
Redcliffe		01	***	59	44	23,131	21,630	- 15	- 1,501
Rockhampton	sun		ANTRITTI EST	74	104	55,370	133,867	+ 39	+ 78,497
Roma				22	28	102,343	31,412	+ 6	- 70,931
South Brisbane		0.0	dipada	29	36	10,984	19,980	+ 7	+ 8,996
Tiaro				30	30	20,349	17,824	about been taken	- 2,525
Foowoomba				54	47	39,370	30,020	- 7	- 9,350
Fownsville	adda an		130.00	34	30	77,750	7,540	- 4	- 70,210

Some very notable additions were made to the areas in certain districts. The most prominent of these districts was Maroochy, where, from an area of 76 acres in 1896, it increased to 234 in 1897. With so large a proportion of young trees it is not surprising to find a comparatively small addition to the production of fruit in that district last year. Other districts in which important additional areas were planted were—Cairns, 46; Nerang, 41; Rockhampton, 30; and Bowen, Caboolture, Cleveland, and Logan, each 22.

Cairns, Maryborough, and Rockhampton were the districts having the largest outputs, and together they aggregated 517,620 dozen, or 32 per cent. of the total production.

Other Crops.—During 1895 and 1896 there was a great increase on the areas returned under "Other Crops," although there was a smaller acreage so recorded in 1896 than in 1895. The decadence of the past two years is perhaps partly explained by a nearly corresponding increase in the area returned under "Garden and Orchard." When the collection of statistics is dependent on non-experts, it is difficult to secure uniformity of practice in matters of detail, and the question being left to the discretion of the proprietor, he is given to enter the subject matter of the return under the definite or the indefinite head, according as the year's return has been a satisfactory one or not.

There were 3,410 acres comprised in the various crops, for which a special line is not provided on the agricultural schedules. As the general table of agriculture will not, for want of space, admit of these being detailed, they are therefore included in one column, and a special table (No. XIV.), giving full particulars, is included in the Appendix. They are there grouped into three divisions—"Other Fruits," "Other Vegetables," and "Other Miscellaneous Crops."

For 1897, the first of these embraced 1,337 acres; the second, 1,935 acres; and the third,

OTHER FRUITS.—The following particulars include the more important of these: -- Cocoanuts, 510 acres, 5,050 dozens; mangoes, 235 acres, 358,315 dozens; melons, 124 acres, 13,286 dozens; gooseberries, 108 acres, 48,630 quarts; apples, 86 acres, 43,401 dozens; plums, 53 acres, 1,192 bushels; lemons, 47 acres, 47,252 dozens; strawberries, 32 acres, 44,142 quarts.

OTHER VEGETABLES.—The chief of these were:—Pumpkins, 1,185 acres, for 4,501 tons; yams and taro, 201 acres, 51 tons; cabbages, 182 acres, 81,420 dozens; cucumbers, 103 acres, 51,862 dozens; tomatoes, 96 acres, 3,720 cwt.

In "Other Miscellaneous Crops," the only novelty was that of 2 acres of roses for perfume. As this is the first occasion on which such an item has appeared on the returns, it is a pity that no information as to results is available.

ARTIFICIALLY SOWN PASTURES.—The acreage of land planted with grasses and used for grazing varies greatly from year to year. This is due to the fact that such land may in one year be utilised for grazing, and in the next shut up for the purpose of being mown either for hay or to be used as green fodder away from the site of growth.

In 1897 there were 15,643 acres of sown pasture contributed by 44 districts.

acres more than in 1896.

There were 8 districts in which the area exceeded 500 acres—namely, Toowoomba, 3,891; Warwick, 3,526; Killarney, 1,594; Herberton, 898; Nerang, 634; Crow's Nest, 625; Maroochy, 615; and Cairns, 537 acres.

ENSILAGE.—The utilisation of fodder by means of the silo would appear at length to be gaining

ground. More than twice as much ensilage was returned on the schedules for 1001 as in 1000.

Full information as to the districts in which not less than 40 tons were made last year is contained

							Tons.
							300
							206
							201
							87
							65
							55
							55
		•••					40
1		• • • •					40
districts							148
T	otal						1 1 9 7
	districts		districts	districts	districts	districts	districts

... ... 1,197

The foregoing Report has been drawn up by Mr. Weedon, Compiler of Statistics, and embodies the information obtained by the Department on the various subjects.

My signature is, in this instance, formal only, as I have only just assumed the office.

J. HUGHES, Registrar-General.

A 120 core commission of the variable of a minute in wall as seemd the source considering the state of a minute in wall as for wall of some said and a seem of the constant of

# APPENDIX.

## LIVE STOCK.

#### Table No. I.

RETURN of the Number of Horses, Cattle, Sheep, and Pigs, in the several Petty Sessions Districts of the Colony of Queensland, on the 31st December, 1897.

Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.	Petty Sessions Districts.	Horses.	Cattle.	Sheep.	Pigs.
Adavale	2.000	40.440	204.040	0.7	T 1	4.000	15.045	500	488
A 11	3,090	43,412	634,049	27	Ingham	4,698	17,245	596	225
A 11	5,674 5,583	17,353	66,961	2,306 394	Inglewood	2,372 3,958	18,553 16,843	69,571 217	2,124
A	1,990	120,307 $25,445$	11,910 311,942	35	Ipswich Isisford	3,832	24,881	624,839	67
A 11 11	2,079			27	TZ*11	1,586	4,934	13	721
1		45,129	153,068		Killarney			210	4,439
2	4,219	13,663	115	943	Laidley	3,445	14,586	88	2,091
11:	5,199 3,606	100,611 13,983	14,404	38	Logan	2,393 9,956	10,689 $37,529$		414
11	5,483	46,074	927,913 348	138	Longreach		153,601	1,764,503 2,967	1,130
)' 1	1,342	15 097	348	6,248 479	Mackay	18,004 1,765	6,974	2,967	3,246
21111	4,929	15,237 $4,728$	979 000		Marburg			1	141
D 1'	8,869	193,361	873,088	257 59	Mareeba	850 1,531	1,484 8,046	61	913
D	9,401	136,790	157,115		Maroochie	5,869	21,838	291	1,586
D!	6,781	13,891	1,892	619 4.250	Maryborough	6,053	100,434	157.486	206
)	8,009	13,891 46,085	813		Mitchell	2,108	100,434	546	428
21				1,991	Mount Morgan		626	940	413
Y-114	6,354 $1,228$	$211,890 \\ 6,961$	83 45	184	Mourilyan	536 5,277	61,328	1,618,339	194
7.	1,943	3,134	76	1,439	Muttaburra		85,792	13,062	1,364
١١	2,073	28,212		1,124	Nanango	5,591 2,520	11,013	179	3,358
y D'	6,103		16,000	55	Nerang	4,651		23,357	593
Y 1 11	840	119,741	28	411	Norman		196,453 28,948	25,557	140
VI 2 122	6.490	2,820 96,884		293	Palmer	1,899	28,948	20	492
11 , 111	13,494	124,939	317,056 418	422	Ravenswood	2,390 1,933	11,054	6	3,018
71. 21.1	1,655	3,675	818	1,364	Redcliffe	19,218	232,424	18,156	4,348
71 /	11,989	183,884		782 661	Rockhampton	6,441	85,873	208,630	667
711	534	1,716	630,376 114	427	Roma Rosewood	2,807	17,607	308	3,346
Cloncurry	11,176	347,868	382,331	321	Q. Q	7,990	63,852	1,184,635	292
Condamine	2,145	27,699	20,731	182	CI T	6,645	142,594	5,482	436
Jook	3,764	21,544	3	607		124	587	0,402	400
Crow's Nest	2,604	17,772	147	1,885	C 11 T) 1 1	3,663	8,442	493	1,690
Croydon	2,573	24,736	13	656	n .	8,557	147,188	259,827	273
Cunnamulla	6,612	79,977	1,267,146	278	2	1,990	16,788	65,999	388
Dalby	8,129	40,038	601,333	1,978		2,492	25,685	222,059	98
Diamantina	3,360	82,339	897	60	T )	3,876	28,390	446,378	52
Douglas	792	1,507	0.01	106	FTS	7,031	140,770	31,408	33
Dugandan	3,561	22,889	257	4,025	Taroom Tenningering	1,707	21,454	80	442
Eidsvold	3,018	79,193	15,331	492	Texas	1,258	10,751	319	98
Emerald	2,628	41,469	142	287	Thargomindah	9,570	304,445	347,715	173
čsk	5,976	67,439	1,210	3,121	Thornborough	2,535	32,506	01,,,20	110
Etheridge	6,146	114,593	1,210	206	Tiaro	4,303	43,714	222	1,561
Culo	1,845	50,831	174,726	34	Toowoomba	12,797	53,388	643,398	5,395
atton	5,366	21,556	543	5,284	Townsville	3,665	10,660	641	1,927
avndah	5,230	145,850	2,301	287	777 . 1	8,459	40,385	186,546	4,153
in Gin	2,383	46,690	326	869		7,320	176,952	341,792	17
Hadstone	7,459	108,841	2,650	738	7771	9,150	137,100	1,059,979	187
Goodna	620	2,357	81	426	XX7 30 3	1,967	19,899	352	1,392
doondiwindi	3,756	39,910	311,260	264	37 11	1,965	16,895	881	343
Hympie	5,649	60,010	2,175	2,367	Yeulba	1,000	10,000	001	
Harrisville	2,930	18,728	491	2,307	Totals for 1897	479,280	6,089,013	17,797,883	110,855
Herberton	5,154	54,875	268	745	Totals for 1896	452,207	6,507,377	19,593,696	97,434
Highfields	2,386	7,562	756	2,037	100018 101 1000	202,201	0,001,011	10,000,000	
Hughenden	15,049	295,056	1,359,017	584	Increase in 1897	27,073			13,421
Hungerford	1,265	1,442	233,072	5	Decrease in 1897	21,010	418,364	1,795,813	

Table No. II.

RETURN of the Number of Cattle and Sheep in the various Petty Sessions Districts comprised in the Southern Division of the Colony for the Years 1896 and 1897, together with the Increase or Decrease in the latter Year.

Petty Sessions Districts.						Cattle.				Sheep.			
reu	y sess.	ions D	istricts.			1896.	1897.	Increase.	Decrease.	1896.	1897.	Increase.	Decrease
							1.0300000000000000000000000000000000000	d well on	Pan				
Adavale						44,391	43,412		979	702,694	634,049		68,64
Allora						16,905	17,353	448		94,549	66,961		27,588
Augathella			'	- 11.		46,688	45,129	7 550	1,559	346,401	153,068 348	401 ··· sie	193,333
Beaudesert Biggenden					•••	38,521 15,548	46,074 15,237	7,553	311	355	940		
Brisbane						10,862	13,891	3,029	011	1,124	1,892	768	
Bundaberg						51,974	46,085		5,889	722	813	91	
Caboolture						6,862	6,961	99		46	45		
Charleville						123,036	96,884		26,152	483,098	317,056		166,04
Childers						1,946	3,675	1,729	104	41	818	777	
Cleveland Condamine						1,850 22,820	1,716 27,699	4,879	134	9,155	20,731	11,576	
Crow's Nest						16,641	17,772	1,131		9,155	147	11,570	54
Cunnamulla						86,260	79,977		6,283	1,338,803	1,267,146		71,65
Dalby						45,214	40,038		5,176	420,169	601,333	181,164	
Diamantina (or						49,164	41,169	Sec	7,995	1,187	448		73
Dugandan			•••			20,966	22,889	1,923	0.711	359	257	1 000	103
Eidsvold Esk			***			81,704 64,640	79,193 67,439	2,799	2,511	14,311 1,094	15,331 1,210	1,020 116	
Eulo						54,538	50,831	2,100	3,707	193,567	174,726		18,84
atton						21,353	21,556	203	T T	333	543	210	
ayndah						140,774	145,850	5,076		2,632	2,301		331
in Gin						46,730	46,690		40	324	326	2	
doodna						2,286	2,357	71		50 269,220	81 311,260	31	
loondiwindi lympie			•••			31,018 53,168	39,910 60,010	8,892 6,842	93	2,545	2,175	42,040	370
Tarrisville						19 958	18,728		1,230	568	491		77
Highfields						7,704	7,562		142	299	756	457	
Iungerford						1,450	1,442	12	200	224,415	233,072	8,657	
nglewood						16,652	18,553	1,901		64,658	69,571	4,913	077
pswich						16,103	16,843 4,934	740		488 128	217 13		271 113
aidley						4,476 $13,143$	14,586	458 1,443	0.00	303	210		95
						10.228	10,689	461		124	88		36
ogan Iarburg						10,228 6,529	6,974	445		35	22		13
laroochy						6,933	8,046	1,113		20	61	41	
Iaryborough						20,076	21,838	1,762		162	291	129	10.04
Iitchell						132,824	100,434		32,390	170,833	157,486 13,062	5,677	13,347
Janango Jerang			•••(0)			89,298 9,889	85,792 11,013	1,124	3,506	7,385 63	179	116	
Redcliffe						10,202	11,054	852		00	6	6	
loma						97,554	85,873		11,681	220,084	208,630		11,454
osewood						14,326	17,607	3,281		258	308	50	
t. George						98,106	63,852		34,254	1,484,193	1,184,635		299,558
outh Brisbane						8,823	8,442		381	1,338 57,716	65 999	0 000	845
tanthorpe urat			•••			17,827 37,523	16,788 25,685	(21	1,039 11,838	268,015	65,999 222,059	8,283	45,956
urat ambo						31,368	28,390	000	2,978	598,444	446,378		152,066
aroom						155,698	140,770		14,928	18,500	31,408	12,908	
enningering						19,408	21,454	2,046		533	80		453
exas						8,698	10,751	2,053		269	319	50	
						315,635	304,445	0.100	11,190	391,484	347,715		43,769
iaro oowoomba						41,581	43,714 53,388	2,133 73		226 743,201	222 643,398		99,80
Varwick						53,315 38,616	40,385	1,769		135,715	186,546	50,831	00,000
Vindorah (one-	half)					129,741	88,476	1,100	41,265	179,780	170,896	50,001	8,88
Voodford						18,971	19,899	928		50	352	302	
eulba						16,997	16,895		102	188	881	693	
						2,565,491	2,405,099	67,268	227,660	8,452,572	7,559,023	330,908	1,224,457

Net decrease in Cattle in the Division, 160,392.

Net decrease in Sheep in the Division, 893,549.

#### Table No. III.

Return of the Number of Cattle and Sheep in the various Petty Sessions Districts comprised in the Central Division of the Colony for the Years 1896 and 1897, together with the Increase or Decrease in the latter Year.

Pe	tty Sessi	nns Dis	stricts				Cattle				Shee	ep.	
		0115 151	ourous.			1896.	1897.	Increase.	Decrease.	1896.	1897.	Increase.	Decrease
Alpha						118,514	120,307	1,793		3,316	11,910	8,594	
Aramac						26,663	25,445	1,100	1,218	298,562	311,942	13,380	
Banana						112,252	100,611		11,641	11,123	14,404	3,281	
Barcaldine						15,106	13,983		1,123	1,070,660	927,913		142,74
Blackall						6,378	4,728		1,650	982,642	873,088		109,55
Boulia						254,895	193,361		61,534	106,489	157,115	50,626	
Clermont						176,871	183,884	7,013		640,966	630,376		10,59
Diamantina (	one-half	)				49,165	41,170		7,995	1,188	449		73
Emerald						50,233	41,469		8,764	115	142	27	
Fladstone						113,343	108,841		4,502	6,481	2,650		3,83
sisford						22,231	24,881	2,650		841,318	624,839		216,47
Longreach						43,840	37,529		6,311	2,005,686	1,764,503		241,18
Mackay (Neb	o collect	ion, s	ay six	elevent	hs)	100,013	83,790		16,223	1,325	1,638	313	
Mount Morga	n					2,682	12,749	10,067		2	546	544	
Muttaburra			1			60,831	61,328	497	1	1,694,104	1,618,339		75,76
Rockhampton						235,466	232,424		3,042	3,652	18,156	14,504	
st. Lawrence						141,271	142,594	1,323		1,023	5,482	4,459	
pringsure	1 70					186,662	147,188		39,474	283,571	259,827		23,74
Windorah (on	e-half)					129,741	88,476		41,265	179,781	170,896		8,88
Winton						145,612	137,100		8,512	1,302,822	1,059,979	·	242,84
						1,991,769	1,801,858	23,343	213,254	9,434,826	8,454,194	95,728	1,076,3

Net decrease in Cattle in the Division, 189,911.

Net decrease in Sheep in the Division, 980,632.

Table No. IV.

RETURN of the Number of Cattle and Sheep in the various Petty Sessions Districts comprising the Northern Division of the Colony for the Years 1896 and 1897, together with the Increase or Decrease in the latter Year.

	Pett	y Sessio	ns Dis	stricts.				Cattle	Э.			Shee	р.	
							1896.	1897.	Increase.	Decrease.	1896.	1897.	Increase.	Decrease
Ayr							22,541	13,663		8,878	1,035	115		920
Bowen							201,619	136,790		64,829	223	310	87	
Burke							163,082	211,890	48,808		41	83	42	
Cairns							1,729	3,134	1,405	100	156	76		80
Camoowea							24,722	28,212	3,490		21,053	16,000	•••	5,053
Cape Rive	r						129,478	119,741		9,737	243			243
Cardwell							4,029	2,820		1,209		28	28	210
Charters T	owers	S					143,505	124,939		18,566	227	418	191	
Cloncurry							296,105	347,868	51,763		353,920	382,331	28,411	
Cook							18,515	21,544	3,029			3	3	
Croydon							19,619	24,736	5,117		2	13	11	
Douglas							1,168	1,507	339		· · · · · ·			
Etheridge							147,059	114,593		32,466				
Herberton							57,820	54,875		2,945	549	268		281
Tughender	1						297,859	295,056		2,803	1,304,368	1,359,017	54.649	
ngham							18,535	17,245		1,290	140	596	456	
Mackay ( eleventh	less s)	Nebo	coll	ection,	say	five	83,345	69,811		13,534	1,104	1,329	225	
Mareeba							2,452	1,484		968		1	1	
Mourilyan							764	626		138			_	
Vorman							230,988	196,453		34,535	23,104	23,357	253	
Palmer							21,035	28,948	7,913		20,101	60	60	
Ravenswoo	od						25,095	22,368		2,727	11	20	9	
Somerset							1,132	587		545	15			15
Chornboro							31,977	32,506	529				•••	
Cownsville							5,944	10,660	4,716		107	641	534	
							1,950,117	1,882,056	127,109	195,170	1,706,298	1,784,666	84,960	6,592

Net decrease in Cattle in the Division, 68,061.

Net increase in Sheep in the Division, 78,368.

#### LIVE STOCK SLAUGHTERED.

Table No. V.

RETURN of LIVE STOCK SLAUGHTERED for PRESERVATION as Food or FREEZING or for TALLOW, during the YEARS 1888-1897, with the Quantity of Meat, Tallow, Lard, &c., produced.

		nents	Hands.			NUM	BER SLAUGH	TERED.				MEAT PR	SSERVED OR I	ROZEN.		Jo		luced
		of Establishments	f		Cattle.			Sheep.			Bee	ef.	Mutt	ton.		•	llow	rd Prod
Y Parket State Sta	ear.	Number of Est	Average Number c employed.	For Preserv- ing.	For Freezing.	For Boiling Down.	For Preserv-	For Freezing.	For Boiling Down.	Hogs.	Preserved.	Frozen.	Preserved.	Frozen,	Bacon.	Extract and Essence Meat Produced.	Quantity of Ta Produced.	Quantity of La
898		5 6 6 16 25 31 39 35	286 989 1,129 1,127 2,848 2,838	21,919 28,683 43,543 77,916 104,969 77,719	12,315 11,266 16,831 8,784 24,567 39,828 48,558 80,487 76,483	32,000 41,166 67,611 98,374 87,562	29,111 170,683 150,668 394,405 385,060 262,151	14,613 85,988 141,763 122,022 162,662 66,025 57,787 75,600 100,550	317,421 1,070,082 417,328 743,257 430,696	350 4,446 17,790 19,329 56,145 48,539 58,870 67,034	3,008,090 7,751,031 ‡17,640,457 §9,849,396 a19,197,234	1b. ¶ 3,99 ¶ 7,40 ¶ 10,63 ¶ 16,19 17,862,694 28,137,501 33,305,023 50,349,956 50,245,213	3,046 6,039	5,650,907 2,851,255 2,749,042 3,064,458 4,571,086	1b.  1,149,778 3,971,018 4,695,280 4,941,512 5,108,726	1b. 71,132 120,199 111,838 135,128 148,135 228,264 168,805 511,533 517,011	tons. 1,109 1,170 2,073 2,632 6,639 11,183 15,683 21,263 12,736	1b. 3,029 15,435 75,102 56,764 84,070 159,093 203,975
Metropolitan Barcaldine Bowen Caboolture Charleville Charters Towers Emerald Esk Gladstone Gatton Hughenden Laidley Longreach Mackay Mareeba Rockhampton Roma St. Lewrence Tenningering Toownownba Townsville Warwick Yeulba	4	38	2,604	62,342	111,267	85,754	259,536	70,865	615,454	76,719	b35,037,555	62,764,267	1,970,959	2,952,290	6,103,485	463,396	13,651	167,74

\* Of this 4,255,733 lb. were preserved, and 11,938,596 lb. frozen. † In 1893 and subsequent years, the pigs killed by farmers for conversion into bacon or pork are included. ‡ Includes 682,955 lb. salted. † Exclusive of pork (fresh and salt), made by farmers, in addition to their bacon. ¶ Prior to this year returns were not separated. a. Includes 182,586 salted. b. Includes 106,499 lb. salted.

0

Table No. VI.
OTHER PRODUCTS OF MEAT PRESERVING, &c., ESTABLISHMENTS.

Year.	No.	Mai	nure.	Edible	Fats.	Hid	es.	Ski	ns.	Bor	nes.	Horns and Hoofs.	Hair	•	Oils, &	tc.	Total Value.
1895 1896 1897	36 35 38	Tons. 4,505 7,321 10,738	£ 11,124 13,627 24,654	1b. 560.219 597,000 673,385	£ 6,599 1,950 8,455	Number. 280,781 239,305 259,160	£ 161,795 141,559 161,979	Number. 1,170,559 770,482 928,330	£ 160,545 119,370 125,043	Tons. 1,332 683 954	£ 5,001 2,808 3,696	£ 3,905 2,288 3,307	1b. 59,434 39,220 76,539	£ 1,979 1,238 1,848	Gallons. 28,454 23,782 18,478	2,661 2,350 1,819	£ 353,609 285,190 330,801

Table No. VII.

RETURN showing the Number of Cattle, Sheep, &c., Slaughtered for Consumption for Food in Some of the Principal Cities of Queensland, together with the Average Dead Weight of each Animal and the Estimated Quantity Consumed per Capita, for 1897.

CITY (in	icludin	g Subur	BS).		POPULATION.		NUMBI	ER SLAUGHTEB	ED.			AVERA	AGE DEAD W	EIGHT.			LB. C	ONSUMED	PER CAP	ITA.	
					Estimated for 1897.	Cattle.	Sheep.	Calves.	Lambs.	Pigs.	Cattle.	Sheep.	Calves.	Lambs.	Pigs.	Beef.	Mutton.	Veal.	Lamb.	Pork.	Tota
			1						100		T.1	T1	T.	T.	T1	5446 53					
Bowen					1.000	011	100	0.1			Lb.	Lb.	Lb.	Lb.	Lb.						
risbare	***			•••	1,800	811	450	84	45	127	700	50	175	30	100	315	12	8	1	7	34
					105,734	28,961	150,496	3,753	4,261	4,774	670	43	62	30	78	184	61	2	1	4	25
Bundaberg					9,321	4,942	8,660	460	200	910	650	45	100	10	_100	345	42	5		10	40
airns					5,712	2,123	2,558	30	40	790	500	40	140	30	100	186	18	1		14	21
harters Towers					22,500	12,781	53,519	427	950	3,722	590	36	130	23	75	335	86	2	1	12	43
ooktown					2,800	1,654	382	16	8	364	534	36	93	17	68	315	5	1		9	38
ladstone*																					
ympie					15,129	4,200	10,500	760	160	950	600	40	60	30	75	167	28	3		5	20
pswich					14,743	6,036	16,637	495	241	792	650	45	50	25	80	266	51	2		4	32
lackay					5,664	5,129	4,142	353	56	400	550	40	133	27	82	498	29	8		C	54
faryborough					12,087	6,763	18,866	582	734	806	650	50	45	35	80	364	78	2	2	0	45
ormanton*								002	104	800	0.0	90	40	99	80	504	10	2	2	9	40
ockhampton					18,555	8,317	20,202		500			***	107								
omo					1,724		30,393	683	796	2,085	650	42	125	25	80	291	69	5	1	9	37
oowoomba						1,505	4,276	10	153	201	519	44	70	29	76	453	109		3	9	57
ownsville			•••		12,600	4,458	17,208	158	200	1,880	784	45	70	28	100	277	61	1		15	35
Varwick					13,302	5,527	25,282	471	929	947	658	39	83	26	87	273	74	3	2	6	35
arwick					4,100	1,742	6,881	61	229	1,472	600	40	120	30	100	255	67	2	2	36	36
Totals					245,771	94,949	350,250	8,343	9,002	20,220	620	42	97	26	85	240	60	3	1	7	31

<sup>\*</sup> Return imperfect.

Table No. VIII.

RETURN showing the Total Extent of Land under Cultivation, and the Area under each Description of Crop, in the several Petry Sessions Districts of the Colony of Queensland during the Voca 1897.

	under	rasses	Land		Land	. 7	WHEA	г.		OATS.		BA	RLEY,	MAIZ	EE.		RYE.		POTA	TOES.		SUG						so	WN GR	ASSES			VIN	ES.			1	1
Petty Sessions	fLan	d'n	of	ow.	of			for			for		for		for		for	iber					or			Millet, Etc.	Luc	erne.	Panio	eum.	So	ther own usses.		ng.				
Districts.	Total Extent o	Artificially	Total Extent under Cultivat	Land in Fallo	Total Extent under Crop.	Grain.	Hay.	n Food	Grain.	Hay.	Green Food Cattle.	Grain.	Hay.  Green Food Cattle.	Grain.	Green Food Cattle.	Grain.	Hay.  Green Food 1 Cattle.	Rice (Grain).	English.	Sweet.	Cotton.	For Sugar.	Green food fo	Arrowroot.	Tobacco.	Sorghum, Mil	Нау.	Green Food for Cattle.	Hay.	Green Food for Cattle.	Нау.	Other Green Fodder.	Bearing.	Not yet Bearing.	Bananas.	Pineapples.	Oranges.	Other Crops.
Southern. East of Main Range.	Acres.		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	A cres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		Acres.
seandesert siggenden biggenden biggenden biggenden birsbane undaberg abouture hilders eleveland brow's Nest bugandan didsvold sk atton ayndah liin Gin boodna symple afarburg farrisville pswich aidley bogan farburg farochy faryborough aroochy farborough anango berang tedelliffe bosewood outh Brisbane aroom emningering diaro.	244 . 155	6 6 6 6 2 2 3 3 1 1 5 5 5 5 5 5 5 6 6 0 0 0 0 0 0 0 0 0 0 0	3,821, 859, 5,065, 1,236, 1,236, 1,236, 1,236, 1,236, 1,246, 889, 4,710, 9,215, 5,54, 3,607, 1,004, 1,104,	121 140 61 1,480 72 131 70 75 137 662 22 21 109 8 130 164 117 3 186 146 117 3 146 173 173 174 175 175 175 175 175 175 175 175	3,700 719 5,004 24,844 1,164 14,557 824 3,936 9,195 489 3,470 14,961 247 2,978 3,083 8,662 3,950 1,481 4,275 4,685 5,293 2,721 237 63 4,193 605	44 2 2		22 88 33 33 34 42 77    66 6 6 6 77 77 77 77 77 77 77 77 77 77	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	237 95 509 2511 108 266 60 1611 197 4514 222 377 108 254 1,197 243 31 130 448 366 676 63 10 464 41	988 1 1 330 1077 60 8 8 111 244 1044 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 1 10 46  58 2  3 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,623 418 596 1,886 542 1,067 24 2,577 7,700 307 2,168 7,774 167 670 670 575 1,439 3,4461 490 634 823 1,952 2,631 3,141 249 54 13 1,470 355	40 8 8 399 1444 233 266 211 177 899 12 255 5 100 300 288 444 655 100 666 8 8 1700 6 6 577 13	1 141 1  46  35 4 1 1 4 	7 4 5	12 2	132 22 375 94 139 50 50 22 382 123 382 17 85 1,310 20 20 47 110 20 143 134 40 170 31 261 501 95 174 33 33 34 34 34 34 34 34 34 4 34 34 34 34	39 400 421 421 2229 588 53 35 44 12 21 15 7 7 88 43 35 0101 205 117 661 161 11 35 87 7 13 36 67 7 13 35 52		21,167 12,952 2,138 2,138 1,585 940 851 1,062 1,015 	1 1 1 3 3 161 8	275		- 65 - 3 - 256 - 2	172 7 262 224 11 13 17 524 4 425 1,765 2 2 19 6 1,211 1 28 538 1,211 1 28 2,606 90 291 21 28 51 36 7 7 8 7 8 9 1 1 1 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	76 98 800 577 9 9 2 24 64 1 1 677 162 3 166 144 200 776 133 58 8 1 200 2	30 61 138 74 22 22 22 22 26 634 47 669 41 279 355 88 1 17 46 25 48 185 268 88 185 27 88 88 185 185 185 185 185 185 185 185 1	6 2 2 28 3 6 14 10 72 2 1 14 23 18 20 9 103 1 8 8 1 10 39 21	6	46	3 3 3 134 18 18 16 7 7 16 6 9 9 11 1 4 10 10 10 1 3 8 5 15 13 13 11 124 4 2 2 1 1 11 16		1 2 23 23 315 1 1 1 1 1 1 1 1 1 1 1 8 12 8 12 8	11 3 57 1 1	9 11 3 45 78 46 11 13 1 7 7 1 17 5 5 1 12 13 14 15 15 15 15 16 16 18 16 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 2
Total East	4,38	34 16	65,928	5,138	160,790	1,920	2,08	3 20	7 55	8,443	2,064	199	185 519	65,233	1,535	272	659 259	14	5,826	2,282	46	43,011	901	387	3	29 1974	9,755	1,455	3,052	470	68	230	777	90	1,567	675 1	312 13	306 1
West of Main Range. Adavale Allora Lugathella Condamine Dalby Diamantina, part of Eulo Goondiwindi Lighfolds		5	9 29,750 5 54 69 67 4,510 1	250  8  274 	5 46 69 67 4,236 1	1,935 	1 4 6 6 4	3 30 30 31 .	. 299	6  62  50		120	4 266	8,124  1 1,437  42	82     	8	  1 9		2 89 1  2 78 	i ::- ::- ::- ::-		000 000 000 000 000 000 000 000 000 00	1010 1010 1010 1010		   	312 5 63 2	9	1,328  2  9 	101    			22  3  	1 45 1 6 6 6 1 18 	5  2 			2 1 2	3 99   78 
Highfields Hungerford Inglewood Killarney Mitchell	1,59		10,815 48 956 7,250 2,066	37 42 80 98	10,778 48 914 7 170 1,968	155 3,079	4	11	309	198  30 21 10	12	66	12   36  1   1   4   1	5,427  399 3,010 22	6 2  47	65	12 8		546 1 12 118 3	8					153	115 4 20 16	38 388	45  10 11	4  3 	8	10	<sub>1</sub>	42  4 5 23	1 1 1 			19 18	51 54 27 17

Table No. VIII .- continued.

RETURN showing the Total Extent of Land under Cultivation, and the Area under each Description of Crop, in the several Petty Sessions Districts of the Colony of Queensland, during the Year 1897—continued.

15	H														UIIC	1 Car	1001		ontinu	cu.																		
Out of the second	under e with rasses.	Land 1.		Land	v	VHEAT.			OATS.		В	ARLEY		MAIZ	E.	R	YE.	10	POTA	TOES.		SUG			20.		100	so	WN GE	ASSES	. 81	3071	VIN	ES.	504	89		02
Totty bessions	t of Land und it Pasture wi Sown Grass	nt of Litration.	Fallow.	Jo	12 80 I 10 812	71212	for	901 12		for		for	105		for		for		1,859	1331	140.93	F003-1	for		61	Millet, etc.	Luc	erne.	Panie	cum.	Sc	ther own asses.	1849	ing.				Orchards
Motes I Reten	Total Extent permanent Artifically	Total Extent of L under Cultivation.	Land in Fal	Total Extent under Crop.	Grain.	Hay.	Green Food Cattle.	Grain.	Нау.	Green Food Cattle.	Grain.	Hay.	Cattle.	Grain.	Green Food Cattle.	Grain.	Hay. Green Food	Rice (Grain)	English.	Sweet.	Cotton.	For Sugar.	Green Food Cattle.	Arrowroot.	Tobacco.	m,	Hay.	Green Food for Cattle.	Hay.	Green Food for Cattle.	Hay.	Other Green Fodder.	Bearing.	Not yet Beari	Bananas.	Pineapples.	Oranges.	Gardens and
SOUTHERN. West of Main ange—continued.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		Acres.	Acres.		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		Acres.
st. George stanthorpe Surat	48	5,817 374 844 57 17	68 50 23 19	5,749 324 821 38 17	3,654 12 126 4	502 143 9 18	36 1 		106 19 214 5	21  2 2	8 4	18 2 2 	6 3 1	416 28 94	103 18 1 3	3	1 5 1		28 18 74 	10 1					14	27 1 2	3 14 32 2	5 4 	27 2 5	22			490 5 18 1	112 1 4 	.18		28 2 6 10	8 8 8 14 8
Texas Thargomindah Toowoomba Warwick Windorah, part of	52 3,891 3,526	1,027 14 45,541 29,096	2,797 195	1,027 14 42,744 28,901	163 17,076 13,229	1,058 537		619 1,	13 ,717 645		795 418	30 6	51 9	224  ,855 ,255	348 37	1 66 43	 13 58 8		1 3 276 515	1 1 1			200			2 630 169	5,482 2,715	1 1 2,868 394	91 71		61	 229 20	2  1 159 141	14 4	2	5	1 47 2 2 6	7 51 60 13
Yeulba Total West		1,402	4	1,398	689	7	7		16	10				216	133	3	5 2		25	17						36	14	2	125	20		2	11				3	5 2
-	-	$\frac{140,019}{305,947}$		296.864				-	_			285 1		,550	2 384		42 84	14	7,625	2 335	46	49 011			100		13,072		3,482	830	86	277	987	147	2			6 1,32
CENTRAL. East of Main Range. Banana Clermont Emerald Hadstone Mackay (Nebo collection)	3	27 223 286 606 25	5 80 58 136 6	22 143 228 470 19	130 	<sub>2</sub> <sub>3</sub>		 1 	 8 3 34			1	1	7 64 17 268 6	6			13	12 12 12 29	13 4 12		321 831 938  	,				1 2  27	 17 3 2	3	40	 1		 2 6 4 2	 1 	1 500	3	16	88 1 5 1
fount Morgan cockhampton ct. Lawrence pringsure	3 134  4	159 4,237 81 293	14 81 11 40	145 4,156 70 253	9		2	3 1,	15 ,267 3 41	 18  9	"i ":		1	21 359 38 118	1 28  4	i ::	 ï		4 87 7 5	25 109 6 4		1,192	100000000000000000000000000000000000000	2		6 6 30 1	4 441 2 	1 13 1 19	12 264 	"i …	14 	<sub>3</sub>	3 44 2 1	4 16  1	1 19 3	5 18 	2 2 104 7	
Total East	144	5,937	431	5,506	141	22	2	4 1	,371	28	1	2	3	898	39	1 .	1		156	173		1,192	1	2	]	7 43	477	56	279	41	15	4	64	23	24	26	144 11	8 14
West of Main Range Alpha Aramac Barcaldine Blackall Boulia Diamantina, part of		187 61	 7 12 	180 49	27	 2 		 1 	80 5				2	11 10	4				7 12 	2 						2	 1 	2 2 2					 6 2	2			2	3 1
or sisford dongreach duttaburra Vindorah, part of Vinton	 16 	15 5 9 2 10		15 5 9 2 10															2 1 2  6	2													1 1  1				 2	i
						7		7		123.11	711	-	-	07	7	-		380	- 00	-	71.1	-		-	-	-		-	-	-								
Total West	16	289	19	270	27	2		1	85				2	21	4				30	5						2	1	4					12	2			4	4 6

Table No. VIII .- continued.

RETURN showing the Total Extent of Land under Cultivation, and the Area under each Description of Crop, in the several Petry Sessions Districts of the Colony of Queensland, during the Year 1897—continued.

	Land under asture with own Grasses.	Land		Land	. 7	VHEAT.			OATS.		ВА	RLEY.	MA	ZE.		RYE.		POT	ATOES.		SUGA					.		sown	GRA	SSES.			VINES	š.		-		
Petty Sessions	t of Land t Pasture Sown Gr	nt of L tivation.	low.	Jo			for			for		for		for		for						for			Mennet Total		ucern	e. ]	Panic	um.	Sown Grasse	1		ring.				Orchard
Districts.	Total Extent of I permanent Partificially Sow	Total Extent of I under Cultivation.	Land in Fallor	Total Extent under Crop.	Grain.	Нау.	Green Food Cattle.	Grain.	Нау.	Green Food Cattle.	Grain.	Hay.	Grain.	Green Food Cattle.	Grain.	Hay.	Gre (Gre	English.	Sweet.	Cotton.	For Sugar.	Green Food Cattle.	Arrowroot.	Tobacco.	Coffee.	How	Green Food	0		Green Food for Cattle.	Hay. Other Green	Fodder.	ring.	Not yet Bear	Bananas.	Pineapples.	Oranges.	Gardens and
NORTHERN. East of	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	A oros		Acres,	Acres.	Acres.	Acres.		Acres.	Acres.	Acres.		Acres.	-
Coast Range. yr owen irins ardwell ook ouglas igham ackay (less Nebo	 537  70 134 4 40	8,123 1,765 8,850 138 680 3,042 9,859 29,722	1,202 75 188 17 41 239 1,037 1,487	6,921 1,690 8,662 121 639 2,803 8,822 28,235		 "1  			 17  2  36	<sub>4</sub> 1 7			211 1,295 1 239 354 283	12 17 3 1  22 16			232 59 109		9 29 150	1 4 2 2	6,510 1,102 4,701  2,048 8,331 27,251	10 5 1 2 3 22		1	40 1 46 13	1				 2  2  2	3 5 6 1	i .	1	2 1 	26 1,709 7 64 54 6	68   1 18 23 1	1 21 5 27 7 70 55 5 89 1 2 11 2	8 3 7 9 5 5 5 1 4
areeba courilyan comerset cownsville		80 6,354 898 292	456 6 10	80 5,898 892 282					<sub>1</sub>				85	4			1 4		3 4 6 68 52 3 33		4,495	220000		3		2 9		.							1,186 109 26	18 3 8	$\begin{bmatrix} 1 & 1 \\ 7 & 1 \\ 1 & 70 \\ 30 & 3 \end{bmatrix}$	5
Total East	785	69,803	4,758	65,045		1			56	13		2	3,106	75			418	22	5 824	2 5	4,438	69		3 2	75 1	37		1	17	6	5 10	3	14	18 3	3,196	163 5	15 10	07 30
West of Costs Range. Like	    	6  32 225 36 150 379 2,979 125 15 91 31 214	         	32 225 36 150 364 2,896 125 11 91 28 208	3			   25	3 1  147  	5  		2	3 3 3 244 290 2,375 45  61 2 110	    1 2 	    	   		1 7 3	2 81			2	2			5	55	14	 2 1    	3	4	7	3 11  1  10 	5	1 1 18 4 10 2 2	6 1 2	16 23 1 1	2 2 2 3 3 1 8 2 
Total West	898	4,283	111	4,172	3			25	221	5		2	2,913	3	7	1 .	13	16	1 244				2					16	13	3	4	9	27	6	39	40 1	08 7	9 10
Total N. Div		74,086	4,869	69,217	3	1		25	277	18		4	6,019	78	-	1 .	431	38			-		2		75 2			17	30	9	5 15			_	3,235			86 41
and Total 1897 ,, 1896				371,857 322,678	59,875 35,831								1 109,721 6 115,715	2,505 1,423			4 445 600	8,197 7,675	3,581 3,131	48 98 280 8	3,093	973 3	09	994 1	38 3,3	35 23, 48 17,8	362 6,2 392 4,6	330 3	,791 ,673	1350 I 825	74 6 80 26			286 4 178 4	1,828 1,477	909   2   1	196 34 791 38	10 3 87 75 3,30
ncrease in 1897 ecrease in 1897	3,683	49,484	305	49,179	24,044	4,053	940	47	2,437	504		9 35	P 004	1,082	125		1 155	52		232	5,548	00		200	73 2		70 1,5	888	118	525	94 20	04		108	351		05 4	65

Table No. IX.

RETURN showing the GROSS PRODUCE of PRINCIPAL CROPS Raised in the several PETTY SESSIONS DISTRICTS of the Colony of Queensland during the Year ended 31st December, 1897.

QUANTITY OF PRODUCE.

ornos (1997) SRINOSENTAS Esta, (1997) Octoborros		9 J F 893	GRAIN C	ROPS			POTA	TOES.		SUGAR	-CANE.							на	٧			VINES.			
PETTY SESSIONS			danier o				TOTA	.1025,		Board	OZZ. Z.		af).												
DISTRICTS.	Wheat.	Oats.	Barley.	Maize,	Rye.	Rice.	English.	Sweet	n.	Sugar- Cane	Sugar.	rrowroot.	Tobacco (cured leaf).	Coffee.	Wheat.	Oats	Bar-	Rye.	Sc	own Gras		Grapes	nas.	apples.	ges.
the policies Successful Successfu	Wileat,		Darrey.	Blatzo.	11, 6.	Rice.	English.	Sweet.	Cotton.	Crushed.	- Sugar.	Arro	E .				ley.		Lucerne	Pani- cum.	Other Sown Grasses.	Gathered.	Banan	Pines	Oran
SOUTHERN. East of Main Range.	Bushels.	Bushels.	Bushels.	Bushels.	Bshls.	Bushels	. Tons.	Tons.	Lb.	Acres.	Tons.	Tons.	Cwt.	Lb.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Lb.	Dozens.	Dozens.	Dozens.
Beaudesert  liggenden  Brisbane  Bundaberg  Caboolture  Childers  Cleveland  Trow's Nest  Dugandan  Cleveland  Crow's Compandan  Cleveland  Compandan  Com	64 25   8,844 195 140 16	Nil	9 14 1,098	86,499 12,187 19,590 48,636 18,707 29,234 669 74,143 221,785 5,381 55,760	150  60  303 251		393 55 953 233 413 99 71 1,231 299 22 217	266 139 2,908 1.096 309 272 315 16 42 25 129				3 5  6  12 			9 3  98 125 26 50	609 209 1,028 582 140 315 72 140 322 89 482	1 15  4 3 8 44  8	 11 2  31  3 259 4 30	480 38 1,672 846 46 65 2 124 1,517 7 1,198	78 104 295 216 4 40 5 6 112 51 229	21 12 	3,230 10,370 334,713 35,788 21,540 6,280 46,338 43,148 39,714 15,680 19,315	300 1,000 179,628 23,641 450 3,280 476,316  17,080 	10 Nil. 196,413 2,723 500 1,008 56,213 	7,230 Nil. 70,867 37,370 9,357 7,510 75,544 9,500 4,780
latton layndah lin Gin loodna lympie larrisville pswich aidley logan	2,197  268  3,969 126	213  1 4  120	548 40 110 1,139 1,100 30	149,471 2,516 20,497 12,860 33,246 120,833 56,965 199,010 35,998	2,067  23  1,287  552 28		1,908 24 54 80 266 378 352 717 878	115 68 92 18 247 202 140 303 1,023	Nil. 1,700 8,525 1,780	35 III			Nil		1,883 16 	712 48 84 178 1,793 2,091 1,059 426 543	86  1 3 18 9 35 1	270  21 118 6 88 12	5,260 9 61 127 499 3,099 2,187 9,877 89	877 10 26 70 121 1,251 223 485 64	10    10 3	187,482 450 7,120 13,960 43,440 15,896 34,369 52,680 125,980	30	Nil 300 12,843	95,380 2,800 7,450 200 13,130 1,860 12,880 50 32,800
Marburg Maroochy Maryborough Wanango Werang Wedeliffe Rosewood Couth Brisbane Caroom	7,475  135	 91 20  45 	60	112,322 16,845 12,844 18,175 72,859 81,228 72,148 6,094 606	32 30 58 	7	211 124 282 60 653 1,246 208 379	340 404 490 29 159 383 63 1,025	3,024	     		52 2,052 32		3,140 827  	32  14 2 10 125 	351 88 1,294 68 319 847 662 1,384 23	41  1 5 9 46 10  Nil.	69 25 5 18 57 Nil	544  401 48 211 666 1,006 1,383 23	139 2 136 88 80 78 368 415 15	20 2 	149,260 12,340 72,957 9,948 38,680 20,630 124,344 260,709 1,258	5,940 648,841 86,253  4,132 3,400	2,676 4,113  306 1,372  5,052	20,20 58,95 157,79 Nil. 97,24 21,65
Tenningering Tiaro Woodford				410 51,634 9,554	48		10 677 68	92 110 279				74			 22 1	12 1,067 103	10 3	294	7 550 44	8 112	 28 8	2,240 23,508 37,826	7,500	770	1,00 17,82 4,16
Total East	23,454	539	4,232	1,658,706	-	408	12,567	11,110	19,957			2,881	13	3,967	3,101	17,140	362	1,323	32,086	5,708	126	1,810,893	3,078,841	284,299	794,47
West of Main Range,				75			8								1,156	984	4		4,789	203	909	4,920 153,128			300
Lugathella Charleville Condamine	211,953	5,386	9,412	182,075			154	2							1,156  4 15 105	20			4			2,940 12,500 17,500 4,300			
Dalby Diamantiná, part of Eulo Joondiwindi	41,370	270	2,472	37,667  675	260		156	49					3		29  67	165  67	12  30	2  1	556  18			56,300 14,200		. N	1,80
Highfields Hungerford Inglewood Killarney Mitchell	61,903  3,054 68,262 8,763	1.517  5,120	2,874	159,721  8,746 98,907 240	1,251		1,469 Nil. 22 355 2	17 3					1,334		298 28 104 14 60	240  39 21 5	19  4	21	908  59 467	6 	31 6	156,71  8,460 33,752 49,060			4,00

Table No. IX .- continued.

RETURN showing the Gross Produce of Principal Crops raised in the several Petty Sessions Districts of the Colony of Queensland during the Year ended 31st December, 1897—continued.

	#24			110							(	QUANTITY	OF P	RODUCE.								15.200			52 too 7000
PETTY SESSIONS DISTRICTS.	18.41.50		GRAIN C	CROPS.			POTA	TOES.		SUGAE	t-CANE,							Н	AY.			VINES.			1200
			-							Sugar-		Arrowroot	cco d leaf).	9.					s	own Gra	sses.		nas.	leapples.	Ses.
	Wheat.	Oats.	Barley.	Maize.	Rye.	Rice.	English.	Sweet.	Cotton.	Cane Crushed.	Sugar.	Arro	Tobacci (cured l	Coffee.	Wheat.	Oats.	Bar- ley.	Rye.	Lucerne	Pani-	Other Sown Grasses.	Grapes Gathered.	Banan	Pinea	Orange
SOUTHERN. West of Main Range—continued.	Bushels.	Bushels.	Bushels.	Bushels.	Bhls.	Bushels.	Tons.	Tons.	Lb.	Acres.	Tons.	Tons.	Cwt.	Lb.	Tons.	Tons.	Tons.	Tons.	Tons,	Tons.	Tons.	Lb.	Dozens.	Dozens.	Dozens.
Roma St. George Stanthorpe Surat	38,920 1,847	Nil  528	50  64	1,518 6 2,454	2		27 8 182	10 1 					196		468 72 15 12	77 8 280 4	22 1 3	1 <sub>2</sub>	3 13 77 Nil	11 1 5		1,058,408 4,700 27,272 1,170			31,412 5,520
Tambo Texas Thargomindah Toowoomba	3,371	11,617	48	6,472	40		10 5 10 511	2					4,153		14	14  2,665	1 76	17	40			6,480  6,126 826,391			3,100
Warwick Windorah, part of Yeulba	240,784 8,364	6,156	9,462	274,583  1,655	266  Nil		1,816	5  36							753 	833	5	10	5,867	148		402,331	3,500	Nil 	30,020 3,800 
Total West	985,195	30,684	45,593	941,762	3,156		4,768	130					5,686		4,703	5,457	177	66	19,722	577	125	2,859,696	3,500	Nil	107,982
Total S. Div	1,008,649	31,223	49,825	2,600,468	8,064	408	17,335	11,240	19,957	29,997	33,706	2,881	5,699	3,967	7,804	22,597	539	1,389	51,808	6,285	251	4,670,589	3,082,341	284,299	902,453
CENTRAL.  East of Main Range.  Banana  Clermont  Emerald  Gladstone  Mackay(Nebo collection)	200	8 		50 144 188 7,134 45			2 14 64	26 9 51	401	 		12			2 5	 6 2 64 	  2		2 1  55	4	3	3,400 15,223 2,240 2,900	200	2,404	2,990 1,852 9,120 600
Mount Morgan Rockhampton St. Lawrence Springsure		41	 15 	412 6,363 720 81	15 	 	8 96 9 3	65 374 11 4	 			6		500 336		21 1,216 5 13			777 3	360 	 19 	3,432 47,202 4,244 7,120	160 15,552 20	323 4,508 	993 133,867 100 60
Total East	224	49	15	15,137	15		196	540				6		836	14	1,327	3		842	388	22	85,761	15,932	7,235	149,582
West of Main Range.  Alpha Aramac						07:306					3,0ths	La Lore		:::			10128		1000	 	100 60	.19		1	piosolie'
Barcaldine Blackall Boulia Diamantina, part of	406	20		18 200 			9 34 	6  		•••				 (!!!)(69)		96 20 	 		1  	'00  20/14 (%	1116 BEC	11,200 9,340 			360
Isisford Longreach Muttaburra Windorah, part of							3 1 7  22	 6.				  		*					 12		 	3,800 848  1,400			300
Total West	406	20	•••	318			76	1														4,360			
Total Central	630	69	15	15,455	15		272	553		700	805	6			1 15	116			1	900	99	30,948	15,099	7.00=	660
Division										700	000	0		836	15	1,443	3		843	388	22	116,709	15,932	7,235	150,242

Table No. IX, -continued.

RETURN showing the Gross Produce of Principal Crops raised in the several Petty Sessions Districts of the Colony of Queensland during the Year ended 31st December, 1897—continued.

OTTA	NTITY	OF	PRODUCE.

PRTIY SESSIONS DISTRICTS.	97.93F 3	6102	GRAIN (	CROPS.		513	POTA	TOES		SUGAR	-CANE.		f).					HA	Υ.			VINES.	10 to 1 to	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Wheat.	Oats.	Powley	No.		D.	18 , 18	98 355 8 356 8 598	Cotton.	Sugar-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Arrowroot.	acco ed lea	99.			Don		S	own Gra	sses.	0 133	nas.	upples.	o G S S
2000 00 PER SERVICE STATES	Wilcat.	Oats.	Barley.	Maize.	Rye.	Rice.	English.	Sweet.	Cott	Cane Crushed.	Sugar.	Arre	Tobacco (cured	Coffee	Wheat.	Oats.	Bar- ley.	Rye.	Lucerne	Pani- cum.	Other Sown Grasses.	Grapes Gathered.	Bana	Pineappl	Oran
NORTHERN. East of Coast Range.	Bushels.	Bushels.	Bushels.	Bushels.	Bshls.	Bushels.	Tons.	Tons.	Lb.	Acres.	Tons.	Tons.	Cwt.	Lb.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Lb.	Dozens.	Dozens.	Dozer
Ayr Bowen Cairns Cardwell Cook Douglas Ingham Mackay (less Nebo collection)				6,776 5,314 45,963 48 4,802 7,392 7,388 10,857		7,162 1,428 3,529 	54 155 24  4 1 11 88	845 99 1,266 210 239 191 583 749	20	     	834 ··· O	     		16,962 112 57,065 Nil. 2,000	1	25  4  82		   		3	12	1,400 690   6,880	1,300 58,050 7,928,662 10,300 74,900 41,985 12,850 8,400	5,575 17,596 162 3,680 2,840 75 808	1,1 93,3 225,9 52,4 30,3 58,2 1,0 7,7
Mourilyan Somerset Townsville			•••	1,790 2,446 50 472		60 30	7 10  139	24 395 52 103			Pable I	0, Ж1,		672		<sub>2</sub>						Nil.  2,200	4,900 5,165,810 12,794 37,560	5,060 590 6,130	1.0 14,5 1 7,5
Total East				93,298		12,298	493	4,756	20	34,735	63,405		4	76,811	1	113	2			29	12	11,080	13,357,511	42,516	493,4
West of Coast Range. Burke Campoweal Cape River Charters Towers Cloncurry Croydon Etheridge Herberton Hughenden Norman Palmer Ravenswood Thornborough Total West	14	204		 60 140  132 206 89,662 242  958 41 2,510		284	2 7 60 12 5 5 28 228 39 4 13 18 4	3 203 4 91 50 434 12 4 33 37 31							(0) (1) (1) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	 5 2  259  259	  4 		 8  168	43 40 40		 5,280 13,940  200  4,260 825 	150  Nil. 15,190 3,100 9,800 2,500 1,680  6,400	6,740  962 6,000 2,466  60 250 996	11,8 28,9 5,4 1,6 23,9 3,1 1,6 1,6 1,1 2,5 2,8
	2			93,951	250	284	420	917				1				566	4	2	176	47		24,613	38,820	17,474	82,
Total N. Div.	14 1,009,293 601,254	204 31,496 32,181	49,840 19,340	2,803,172 3,065,333	8,329 7,419	12,582 12,990 2,528	913 18,520 18,451	$\frac{5,673}{17,466}$ $14,322$	19,977 141,032	34,735 65,432 66,640	97,916 100,774	2,888 2,603	5,703	76,811 81,614 9,707	7,820 1,689	679 24,719 17,836		$\frac{2}{1,391}$	52,827	6,749	285	4,822,991	13,396,331 16,494,604	351,524 912,005	575, 1,628,
ncreases in 1897 Decreases in 1897	408,039	685	30,500	262,161	910	10,462	69	3,144	121,055	1,208	2,858	285	2,926	71,907	6,131	6,883	47	674	11,028 	7,117	136	5,122,531	17,059,124  564,520	313,835	279,

Table No. X.

Showing the Total Extent of Land under Cultivation, and the Area under each Description of Crop—Return for Ten Years.

	Land tion.		Land				5000000								AREA	UNI	DER EAG	CH DESC	CRIPTIO	N OF CR	ROP.								201230			
Ye	of	allow.	# C	594 5 93	181-6-	GRAI	N CROPS.	3 1 1 9 L		POTA	TOES.		16.	t.	100.3		382 5 83		1	HAY CROP	PS.			e and Green ge.		VINES.	719	1000 11	rô.	37	ps.	nd s.
	Total Exte	Land in Fs	Total Extent cunder Crop.	Wheat.	Oats.	Barley	Maize.	Rye.	Rice.	English.	Sweet.	Cotton.	Sugar-Car	Arrowroo	Tobacco.	Coffee.	Wheat.	Oats.	Barley.	Rye.	Lucerne.	Pani- cum.	Other.	Lucerne Other ( Forag	For Wine- making.	For Table Use.	Unpro-	Bananas.	Pineapple	Oranges.	Other Crop	Gardens a Orchard
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres,	Acres.	Acres.	Acres.	Acres.
188 189 189 189 189 189	9 247,073 0 239,618 1 258,004 2 260,328 1 252,075	14,430 14,625 15,375 13,097 8,826	232,643 224,993 242,629 247,731	9,305 8,459 10,390 19,306 31,742 28,993 28,997	642 750 411 715 591 606 1,477	324 1,254 584 739 385 495 1,418	85,966 97,698 99,400 101,598 92,172 93,556 103,671	169 538 360 496 283	497 249 300 457 1,113 789 650	5,338 4,484 6,270 9,173 8,493 8,306 10,523	1,965 2,701 2,724 2,805 2,964 2,997 2,775	1 16 90 717 191 100	47,340 49,741 50,922 50,948 55,520 59,251 71,818	149 210 276 237 222 192 282	123 266 540 790 318 475 915		193 7,326 1,610 1,082 1,423 2,417 4,643	5,306 12,717 8,913 10,212 9,065 9,943 10,993	202 544 258 224 129 236 195	 464 313 319	13,798 22,848 18,424 17,678 13,249 8,443 10,228	1,273 1,981 1,652 1,287 1,240 1,025 1,490	206 201 249 172 95 128 160	11,281 10,120 9,546 10,760 14,690 13,336 12,029	600 655 690 681 858 645 605	832 791 940 1,022 880 975 1,062	271 317 351 285 170 380 320	2,220 3,282 3,890 3,897 3,059 2,423 3,075	581 628 721 1,138 1,035 803 819	1,068 1,194 1,234 1,423 1,724 1,630 1,672	893 1,700 2,088 2,072 1,694 1,320 1,434	2,614 2,526 2,425 3,300 3,359 2,885 3,029
189 189 189	299,278 336,775 386,259	13,959 14,097 14,402	285,319 322,678 371,857	27,090 35,831 59,875	922 1,881 1,834	721 1,122 2,077	100,481 115,715 109,721	202 345 470	716 600 445	9,240 7,672 8,197	2,736 3,131 3,581	494 280 48	77,247 83,093 98,641	194 309 391	1,061 994 755	60 138 311	1,344 1,845 5,898	9,763 11,565 14,002	221 282 291	410 427 702	14,315 17,892 23,362	2,411 3,673 3,791	145 80 174	19,552 19,509 19,903	1,7	82* 842	239 178 286	3,916 4,477 4,828	847 823 909	1,900 1,791 2,196	4,121 3,875 3,410	3,189 3,308 3,878

<sup>\*</sup> These can no longer be kept separate.

Table No. XI.

SHOWING the GROSS PRODUCE of PRINCIPAL CROPS raised in the Colony of Queensland-RETURN for TEN YEARS.

0000									-			QUAN	NTITY C	F PRO	DUCE.											
1 (14) (1 (30)		12.545	GRAIN	CROPS.			atoes.	toes.		SUGAR	-CANE.	ot al).	ured					HAY				VINE	s.	19900		24.00
-	1	1			1		Pot	Potato				wrood	00 (C)					1	So	wn Grass	ses.		1	09	ples.	D.
When	at.	Oats.	Barley.	Maize.	Rye.	Rice.	English	Sweet ]	Cotton	Sugar- Cane Crushed.	Sugar.	Arrov (Comme	Tobace Leaf).	Coffee.	Wheat.	Oats.	Barley.	Rye.	Lucerne.	Pani- cum.	Other Sown Grasses.	Wine Made.	Grapes for Table Use.	Banan	Pineap	Orange
Bushe 3 8,3 134,3 207,3 1 392,3 462,6 413,6 545,1	263 335 990 309 583	ushels. 3,626 14,561 8,967 16,669 12,965 12,096 30,463	Bushels. 7,432 26,630 12,673 21,302 6,969 8,396 37,824	Bushels. 2,181,681 1,743,051 2,373,803 3,077,915 2,333,553 1,824,108 2,684,925	Bushels. * 2,672 12,434 8,001 9,479 5,251	Bushels. 17,507 4,121 10,553 21,461 33,380 32,043 24,866	Tons. 10,119 10,650 13,112 25,018 20,498 17,165 28,185	15,657 16,168 12,640	Lb 7 5,315 48,746 212,370 29,353 †54,801	Acres. 32,375 29,438 40,208 36,821 40,572 43,670 49,839	Tons. 34,659 40,169 68,924 51,219 61,368 76,146 91,712	Lb. 254,870 583,989 712,144 682,252 576,738 448,737 534,687	Cwt. 1,418 2,531 2,392 7,704 3,808 4,577 9,571	Lb	Tons. 263 14,333 2,646 1,783 2,177 2,820 6,362	Tons. 5,474 29,093 14,219 18,832 16,844 17,831 20,300	Tons. 112 1,691 414 672 225 452 336	Tons	Tons. 23,922 38,968 29,622 34,552 31,147 18,734 25,236	Tons. 2,150 3,734 2,857 2,659 2,465 1,715 2,615	Tons. 370 353 358 344 154 304 230	Gallons. 144,239 164,626 189,274 168,526 193,327 101,528 176,497	Lb. 1,835,831 1,967,667 2,404,863 2,619,337 2,267,087 2,081,854 3,160,580	Dozens. 6,320,858 4,993,517 22,002,092 11,644,769 14,277,663 10,591,306 8,928,025	227,785 263,349 543,415 663,803 343,773	913,75 1,090,80 1,689,46 2,663,21
												(Tubers.)		0.130	0152.0	1860						Total Wine made from a portion of the Grapes returned in the adjoining column.	All Grapes gathered.			
123,6 601,5 7 1,009,5	254 3	10,887 32,181 81,496	7,756 19,340 49,840	2,391,378 3,065,333 2,803,172	4,169 7,449 8,329	19,245 20,528 12,990	18,451	14,233 14,322 17,466	†269,110 †141,032 †19,977	55,771 66,640 65,432	86,255 100,774 97,916	Tons. 1,289 2,603 2,888	7,511 8,629 5,703	* 14,060 9,707 81,614	1,344 1,689 7,820	12,498 17,836 24,719	372 501 548	944 717 1,391	30,835 41,799 52,827	4,662 7,017 6,749	226 136 285	Gallons. 238,208 170,733 207,945	Lb. 4,254,795 5,122,531 4,822,991	14,860,386 17,059,124 16,494,604	313,835	1,995,875 1,348,990 1,628,176

<sup>\*</sup> Not specially returned in previous years.

<sup>†</sup> Unginned.

# 47

AVERAGE PRODUCE PER ACRE OF PRINCIPAL CROPS—RETURN FOR TEN YEARS.

Table No. XII.

1000	13					3113	h es.	atoes		Acresd).								so	WN GRASSE	s.					
Year.	Wheat Grain.	Oats Grain.	Barley Grain.	Maize.	Rye Grain.	Rice.	English Potatoes	Sweet Pot	Cotton.	Sugar (on Acre Crushed).	(Commercial)	Tobacco (Dried Leaf).	Coffee.	Wheat (Hay).	Oats (Hay).	Barley (Hay).	Rye (Hay).	Lucerne (Hay).	Panicum (Hay).	Other Sown Grasses (Hay).	Wine.	Grapes for Table Use.	Bananas.	Pine-Apples.	Oranges.
		Bushels.			Bushels.		Tons.	Tons.	Lb.	Tons.	Lb.	Cwt.	Lb.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Gallons.	Lb.	Dozens.	Dozens.	Dozens.
1888 1889	0.89	5.65	22.94	25·38 17·84		37·41 8·81	1.90 2.38	5·39 5·64	*7.00	1.07 1.36	1,710·54 2,780·90	11·53 9·52		1·36 1·96	1·03 2·29	0·55 3·11		1·73 1·71	1.69 1.88	1·80 1·76	240·40 251·34	2,206·53 2,487·57	2,847·23 1,521·49	323·14 362·71	695·15 329·74
1890		21.82	21.70	23.88	15.81	22.55	2.09	5.76	*332.19	1.69	2,580.23	4.43		1.64	1.60	1.60		1.61	1.73	1.44	274.31	2,547.73	5,656.06	365.26	740.49
1891	20.32	23.31	28.83		23.11	46.96	2.73	5.58	*541.62	1.39	2,878.70	9.75		1.65	1.85	3.00		1.96	2.07	2.00	247.47	2,562.95	2,988.14	477.52	766.55
1892	14.57	21.94	18.10	25.32	22.23	29.99	2.41	5.45	*296.19	1.51	2,597.92	11.97		1.53	1.86	1.74	1.87	2.35	1.99	1.62	225.32	2,576.24	4,667.43	641.36	979.97
	14.25	19.96	16.96	19.50	19.11	40.61	2.07	4.22	*153.68	1.74	2,337.17	9.64		1.17	1.79	1.92	1:59	2.22	1.67	2.38	157.41	2,135.23	4,371.15	428.11	1,633.87
1894	18.80	20.62	26.67	25.90	18.55	38.26	2.68	5.12	†548.01	1.84	1,896.05	10.46		1.37	1.85	1.72	1.93	2.47	1.76	1.44	291.73	2,976.06	2,903.42	837.77	1,225.43
100	137038	Mark Control									(Tubers.)							13.30			‡ G	rapes.			
ser low.	e" (50	UK ISI T	ande:								Tons.											Lb,			1
1895	4.56	11.81	10.76		20.64	26.88	2.06	5:20	†544.76	1.55	6.65	7.08	234.33		1.28	1.68	2.30	2.15	1.93	1.56		87.65	3,794.79		1,050.46
1896 1897	16.78	17.10	17.24	26.49	21·59 17·72	34.21 29.19	2.40	4·57 4·88	†503·69 †416·19	1.51	8·42 7·39	8.68	70.34 262.42		1.54	1.78	1.68 1.98	2.34	1·91 1·78	1.70		80.96	3,810·39 3,416·45	381·33 386·72	753·20 741·43
1007	10.90	1111	24 00	20 00	11/14	2010	2 20	400	1410.19	1 90	1 39	1 99	202 42	1 99	1.77	100	1 90	4 20	170	1.04	2,5	64.06	9,410.49	500.12	741.43

\* Ginned

† Unginned.

† The manufacture of wine by the purchasers of the grapes and not the growers has now attained such proportions that the returns can no longer be kept distinct.

Table No. XIII.

RETURN for the Year 1897, showing the Extent of Land Sown with Wheat Grain in the several Petty Sessions Districts from which Returns have been received, the Area Mown for Hay, Reaped for Grain, Cut for Green Feed for Cattle, and Unproductive, respectively; also the Area affected with Rust, free from Rust, and the Produce.

											RES	ULTS.					
* * * * * * * * * * * * * * * * * * *	Total Extent of Land	Total Area	Total Area	Total Area Cut	Total Area			AFFECTED	WITH RUST					FREE 1	ROM RUST.		
PETTY SESSIONS DISTRICTS.	Sown with Wheat Grain.	Mown for Hay.	Reaped for Grain.	for Green Food for Cattle.	Unproductive.	Total Area	н	AY.		GRAIN.		Total Area	Н	AY.		GRAIN.	
SOV John Park Se Co	A findle	Degr	- 20 4.0			affected with Rust.	Acres.	Produce.	Acres.	Produce.	Average per Acre.	free from Rust.	Acres.	Produce.	Acres.	Produce.	Average per Acre.
SOUTH.  East of Main Range.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	287 J. 38	Tons.		Bushels.	Bushels.	Acres.	100	Tons.	97203	Bushels.	Bushels.
Biggenden	9	5	2	2		5	3	6	2	25	12.50	2	2	3			
Brisbane	1			1													
Bundaberg	$\frac{1}{2}$	. 1	2.08. B.I	2 100180	1	1,898.051	1	3		183 183	- · · · ·	40I 4F	39143	\$712.07	0 .5:4:0	42   1837 7	1 579,-13
Beaudesert	14	100	4	10		4			4	64	16:00	015 38	12.4	8.182-8		16 W. W. S. T.	1 877 87
Caboolture Crow's Nest	4		100	4					100	0.700	10.00	1 80 [ 85	100	3.0	1 9		040.04
0111	539	52	469	1	17	228	29	55	199	3,199	16.08	293	23	43	- 270	5,645	20.91
01.11.1	1			1		•••					1 4.1			2			740 46
D	121	70	19	1	31			100			10.00				.1.201	art	
771.1.1.1	32	78 23	12	1		60	58	$\frac{102}{12}$	2	20	10.00	30 25	20	23	10	175	17.50
Tilel	30	23	1	3	3	15	15	28				9	17	14	8	140	17.50
Matten	1,715	1,294	217	21	183	1,418	1,268	1,833	150	1,372	9.15	93	8 26	22 50	67	16	16.00
Gayndah	12	7			5			1				7	7	16		825	12.31
Gympie	8		3 5 3	5	3					19907	CONTRACTOR OF	no estre popular				***113	
Hamiavilla	187	148	19	18	2	138	133	220	5	42	8.40	29	15	32	14	226	10.14
Ipswich	9			7	2												16.14
Laidley	881	316	370	6	189	564	252	322	312	3,016	9.67	122	64	101	58	953	16.43
Logan	16	2	10	4								12	2	5	10	126	12.60
Marburg	83	20		62	1	4	18.4	7.00				16	16	25			
Maryborough	2				2												
Maroochy	5	Y	ARKREE	5	OR LER	TOTAL OF	SHILL	OTS.VITE	BOLLET	TERLINES	- WOLL DE	MALEY 10					
Nanango	364	9	347		8	8			8	160	20.00	348	9	14	339	7,315	21.58
Nerang	8	1		7		1	1	2								*,010	
Redcliffe	12	7		5		1	1	1				6	6	9			
Rosewood	116	71	7	30	8	32	32	56				46	39	69	7	135	19.29
South Brisbane	8			8													
Taroom	3	3										3	3	5			
Tiaro	27	22		5		2	2	5				20	20	17			
Woodford	1	1				1	1	1									
Totals	4,210	2,083	1,466	207	454	2,488	1,806	2,653	682	7,898	11.59	1,061	277	448	784	15,556	19.84

South.		1	1		1					-							
West of Main Range.																	
Allora	13,794 13 60 41 1,984 52 3,314 41 196 3,093 1,782 4,192 156 135 22 179 18,147 13,787 703	902 13 60 40 49 37 194 41 41 109 502 143 9 18 16 1,058 537 7	12,463  1,919 7 3,094  155 3,052 1,474 3,654  124  163 16,843 12,606 686		429	8,281  440 14 1,101  1 184  18  8,023 7,540	810	1,036 26 29 216 6 1,177 702	7,471 402 957 1 184 16 7,174 7,045	115,890 7,399 14,905 28 2,584 25 100,942 126,739	15:51   18:41  15:57  28:00 14:04   1:56  14:08 17:99	5,084 13 60 41 1,528 30 2,187 41 195 2,882 1,583 4,156 143 115 18 179 9,878 5,603 693	92 13 60 40 11 23 50 41 41 14 109 502 143 7 18 16 209 42	120 4 105 15 3 38 82 28 104 14 60 468 72 9 12 14 304 51 8	4,992  1,517 7 2,137  154 2,868 1,474 3,654  108  163 9,669 5,561 686	96,063  6 33,971 90 46,998  3,026 65,678 8,763 38,920  1,822  3,371 195,566 114,045 8,364	19·24  6·00 22·39 12·86 21 99  19·65 22·90 5·95 10·65  20·68 20·23 20·51 12·19
Total	61,691	3,790	56,241	117	1,543	25,602	2,352	3192	23,250	368,512	15.85	34,429	1,438	1,511	32,991	616,683	18.69
Total Southern	65,901	5,873	57,707	324	1,997	28,090	4,158	5,845	23,932	376,410	15.73	35,490	1,715	1,959	33,775	632,239	18.72
CENTRAL.  Barcaldine	29 4 130 3 28	$\begin{array}{c} 2\\ 2\\\\ 3\\ 17 \end{array}$	 27  50  3	   2	 2 80  6		  				  	29 2 50 3 20	2 2  3 17	1 2  5 7	27  50  3	406  200  24	15·04  4·00  8·00
Total Central	194	24	80	2	88							104	24	15	80	630	7.88
North.  Cairns  Herberton	1 3		1		2							1 1			1	14	14:00
Total North	4	1	1		2							2	1	1	1	14	14:00
Total Colony	66,099	5,898	57,788	326	2,087	28,090	4,158	5,845	23,932	376,410	15.73	35,596	1,740	1,975	33,856	632,883	18.69

OTHER CROPS.

### Table No. XIV.

SHOWING the PRODUCE Obtained during the Year 1897 from "OTHER CROPS," details of which are not included in the GENERAL TABLE.

7 734									Отн	er Prui	TS.											01	THER V	VEGET	ABLES							От	HER 2	Miscei	LANE	ous Ce	ROPS.		
PETTY SESSIONS DISTRICT,	Apples.	Apricots.	Cherries.	Cocoanuts.	Custard Apples.	Figs.	Gooseberries.	Guavas.	Lemons.	Mangoes.	Melons.	Nectarines. Passion Fruit.	Peaches.	Pea Nuts.	Pears.	Persimmons.	Plums.	Strawberries.	Beans.	Camorts	Canlifforname	Cucumbers.	Marrows.	Onions.	Peas.	Pumpkins.		Turnips.	Yams and Taro.	Ramr Corn. Broom Millet.	Canary Seed.	Cassava, Manioc, or Tapioca.	Chicory.	Cow Pea.	Ginger.	Lucerne for Seed.	Mangel Wurzel.	Panieum for Seed.	Rosellas.
1115 1090 11643	Acres.	Acre.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres	A Greek	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Aeres.
outh— East of Main Range	- 6				13	1	108	1	14	. 57		8	10	5	1	27	26		8			7   .10		9	27	470 42	95	12		4			10	4			6		4
West of Main Range	75	8	2			1			2		8	1	22		3		26		1	14				41	9	574 1				2	13			1		53	1	8	
entral— East of Main Range	1								1	. 25	7		2		,				1	15						62				1				2					1
West of Main Range orthern— East of Main Range				510				2	2	149	1		1	23									11			1 56 1			201						3				
West of Main Range	4								6	. 4	12		3	1			1			21						22	1	3	.19.										1
Total Area	86	8	2	510	14	2	108	3	47 6	235	124	1 8	38	29	4	27	53	32	10 1	82	5	7 10	03 1	50	36	1,185 44	96	15	201	7 2	13	8	11	8	3	53	7	8	6
E 4111 50 - 67 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Dozens.	Dozens.	Bushels.	Dozens.	Dozens.	Dozens.	Quarts.	Dozens.	Dozens.	Dozens.	Dozens.	Dozens.	Dozens.	Lb.	Dozens.	Dozens.	Bushels.	Quarts.	Bushels.	Dozene	Dozone	Dozens.	Tons.	Cwt.	Bushels.	Tons.	Cwt.	Cwt.	Tons.	Eusneis.	Bushels.	Tons.	Tons.	Bushels.	Lb.	Lb.	Tons.	Bushels.	Bushels.
ath— East of Main Range	594				483	536	48,630	3,000	8,980	34,08	9 11,14	21,66	0 6,770	4,450	800	8,283	891	43,642	656 42,	973 3,1	56 3,9	74 51,8	862 3	468	1,248	1,676 33	0 3,68	8 773	20	36			8	80			-114		413
West of Main Range	41,036	2,570	32			1,400			500	.}	340	60	34,96		872		297		16 20,	453				1,816	160	2,319 2				800	224			20		6,360	Nil	172	
ntral— East of Main Range	121							4	1,173	6,16	9 508		1,120						60 6,	279						230				7				20					31
Vest of Main Range rthern—									20				50													1													
ast of Main Range				5,050	1,010				28,259 N	1			1.07	42,560				500		706						197 3	32		51	(4)		16	4		,720				NT:1
Vest of Main Range	1,650								8,320	5,62	0 1,180		1,878	448			4		4,	009						78	32	70											Nil
Total Produce	43.401	2.570	32	5,050	1,493	1,936	48,630	4,090	47,252 N	358,31	5 13,28	3 60 21,66	0, 44,778	47,488	1,672	8,288	1,192	44.142	732 81.	420 3,1	56 3.9	74 51.8	862 3	2,284	1 408	4,501 33	35 3,72	0 843	513	17 800	224	16	12	150 6	,720	6,360	114	172	444

<sup>\*</sup> Sold to Perfumers.

## SUGAR RETURNS, 1897.

## TABLE XV.

District.	Area for Plants.	Area Newly Planted, and Stand Over.	Area Crushed for Sugar.	Total Area for Sugar.	Weight of Cane.	Sugar.	Molasses.
Southern.	Acres.	Acres.	Acres.	Acres.	Tons.	Tons.	Gallons.
Bundaberg and Gin Gin	316	6,850	16,139	23,305	140,789	16,999	377,720
Childers, Maryborough, and Tia		4,180	10,936	15,253	144,903	13,867	577,750
Logan	21	557	1,007	1,585	9,208	765	35,880
Marburg	19	311	610	940	3,615	300	12,000
Maroochy and Gympie	22	347	544	913	9,610	963	2,000
Nerang	9	245	761	1,015	8,745	812	16,200
Total Southern	524	12,490	29,997	43,011	316,870	33,706	1,021,550
Central.							
Rockhampton	13	479	700	1,192	7,232	805	30,000
Northern.							
Ayr	120	1,986	4,404	6,510	73,307	8,236	37,920
Bowen	28	492	582	1,102	10,918	1,350	
Cairns and Douglas	104	3,415	3,230	6,749	36,420	6,341	124,000
Ingham and Mourilyan	207	2,894	9,725	12,826	194,504	24,874	698,000
Mackay	787	9,670	16,794	27,251	165,564	22,604	452,550
Total Northern	1,246	18,457	34,735	54,438	480,713	63,405	1,312,470
Total Colony	1,783	31,426	65,432	98,641	804,815	97,916	2,364,020

N.B.—The molasses shown above is far short of the quantity producd, but may be taken as the quantity conserved and utilised. Many mills allow this product to run to waste.

Price, 1s. 4d.]

By Authority: EDMUND GREGORY, Government Printer, William street, Brisbane.